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ABSTRACT

A brief summary of data gathered from the Survey of Earned Doctorates during the academic year 1976-1977 is presented in this, the eleventh in a series of yearly summaries of data, a series that began in 1967. Data was obtained from questionnaires filled out by the graduates as they completed all requirements for their doctoral degrees, and refers to doctorates earned during the period July 1, 1976 to June 30, 1977, exclusive of professional degrees such as the M.D., D.D.S. and D.V.M. Statistics show that the 31,672 doctorates awarded by U.S. universities in 1977 was a 3.8 percent decrease from the 1976 figure of 32,936. In an analysis of 10 selected fields, graduate programs in mathematics, physics, chemistry, electrical engineering, zoology, and German rated as distinguished in earlier studies showed smaller percentage decrease in numbers of Ph.D.'s than programs with lower ratings. This was not true in mechanical engineering, entomology, geography and the classics. The number of doctorates awarded to men decreased by 5.6 percent from 25,253 in 1976 to 23,827 in 1977 while the number of doctorates awarded to women increased by 2.1 percent from 7,683 in 1976 to 7,845. It is also shown that the proportion of Ph.D.'s still seeking postdoctoral study at time of Ph.D. increased from 4.4 percent in 1976 to 4.8 percent in 1977 and the proportion of Ph.D.'s still seeking employment at time of Ph.D. in 1977 was 21.3 percent, unchanged from 1976. (SPG)

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HIGHLIGHTS

- The 31,672 doctorates awarded by United States universities in 1977 was a 3.8% decrease from the 1976 figure of 32,936.

- There has been a decrease in the total number of Ph.D.'s in each year since 1973 and the largest of these decreases, 1,264 Ph.D.'s, occurred between 1976 and 1977.

- In an analysis of ten selected fields, graduate programs in mathematics, physics, chemistry, electrical engineering, zoology, and German rated as distinguished in earlier studies showed smaller percentage decreases in number of Ph.D.'s than programs with lower ratings. This was not true in mechanical engineering, entomology, geography and the classics.

- The number of doctorates awarded to men decreased by 5.6% from 25,253 in 1976 to 23,827 in 1977. The number of men Ph.D.'s decreased in all seven broad fields.

- The number of doctorates in the physical sciences and engineering awarded to men in 1977 is smaller than the number in 1967.

- The proportion of doctorates awarded to women continued to increase reaching an all-time high of 24.8% in 1977.

- The number of doctorates awarded to women increased by 2.1% from 7,683 in 1976 to 7,845.

- The number of women Ph.D.'s increased in all broad fields except the life sciences and the humanities.

- The proportion of Ph.D.'s still seeking postdoctoral study at time of Ph.D. increased from 4.4% in 1976 to 4.8% in 1977.

- The proportion of Ph.D.'s still seeking employment at time of Ph.D. in 1977 was 21.3%, unchanged from 1976.

Summary Report 1977 DOCTORATE RECIPIENTS FROM UNITED STATES UNIVERSITIES

The Survey of Earned Doctorates is
conducted by the
National Research Council for the
National Science Foundation,
the U.S. Office of Education,
the National Institutes of Health, and
the National Endowment for the Humanities

Dorothy M. Gilford
Project Director

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Commission on Human Resources
NATIONAL RESEARCH COUNCIL

NATIONAL ACADEMY OF SCIENCES
February 1978

FOREWORD

This report presents a brief summary of data gathered from the Survey of Earned Doctorates during the academic year 1976-1977. The survey is conducted annually by the Commission on Human Resources (CHR) of the National Research Council. Questionnaire forms, distributed with the cooperation of the Graduate Deans, are filled out by the graduates as they complete all requirements for their doctoral degrees. The data in this report refer to doctorates earned during the period July 1, 1976 to June 30, 1977, but they do not include professional degrees such as the M.D., D.D.S. and D.V.M.

This is the eleventh in a series of yearly summaries of data from the Survey of Earned Doctorates, a series that began in 1967. The CHR publishes data gathered during a given fiscal year in the following fiscal year. Trend data from an earlier period can be found in the book, *Doctorate Recipients from United States Universities 1958-1975* (NAS publication 1489). A comparable report for the period 1967-1975 is in press. This book will also include selected trend data on doctorates for the past century.

The distribution of the Survey of Earned Doctorates questionnaire, the maintenance of the resulting data file, and the publication of this report are supported jointly by the National Science Foundation, the United States Office of Education, the National Institutes of Health, and the National Endowment for the Humanities. The CHR wishes to express its appreciation to these agencies for their assistance.

The Survey of Earned Doctorates is under the administrative supervision of Dorothy M. Gilford. Peter Syverson and Muriel Quinones had continuing responsibility for the development of the summary statistics and the graphics in the report. Charles Dickens of the National Science Foundation, Donald Bigelow of the U.S. Office of Education, William Copeland of the National Institutes of Health, and Stanley Turesky of the National Endowment for the Humanities have provided constructive advice in the design and analysis of the survey which increases its relevence to national policy issues. Dael L. Wolfle served as lead reviewer for the report and Judith Blake, P. L. Thibaut Brian, and Lyle V. Jones, all members of the CHR, also provided valuable assistance in review of the report. Special thanks also go to Doris Rogowski who supervised the coding and editing of the data and to Joseph Finan and George Boyce who were responsible for the computer programming and processing.

The CHR is concerned with those activities of the National Research Council that contribute to the more effective development and utilization of the nation's human resources. Its programs seek to strengthen higher education and to develop better understanding of the educational process. It is hoped that prompt reporting of the present data to educational, governmental, and professional agencies will facilitate planning in higher education. Suggestions for improvement of the content or format of the report and questions or comments will be welcomed. Such communications may be directed to the Commission on Human Resources, National Research Council, 2101 Constitution Avenue, Washington, D. C. 20418.

Dorothy M. Gilford
Director, Human Resources Studies

NOTICE: This report is based on research conducted by the National Research Council with the support of the National Science Foundation, the U.S. Office of Education, the National Institutes of Health and the National Endowment for the Humanities under Contract No. NSF-C310, Task Order 82. Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of the sponsoring agencies.

INTRODUCTION

The total number of doctorate recipients in 1977 was 31,672 (Text Table A). This number constitutes a decrease of 1,264 or 3.8%, from the 32,936 doctorates awarded in 1976.

TEXT TABLE A
Doctorates Awarded by U.S. Universities, 1967-1977

Year	Doctorates[1]	Year	Doctorates
1967	20,406	1973	33,755
1968	22,938	1974	33,046
1969	25,746	1975	32,948
1970	29,500	1976	32,936
1971	31,872	1977	31,672
1972	33,044		

Figure 1, which displays data from Text Table A on the trend in doctorates awarded by U.S. universities, shows a small drop in number of doctorates granted each year since 1973 with the largest drop of 1,264 (3.8%) occurring between 1976 and 1977. This is the largest annual drop in number of doctorate recipients in the 117 years that doctorates have been awarded by United States universities. It is the largest percentage drop since 1956.[2]

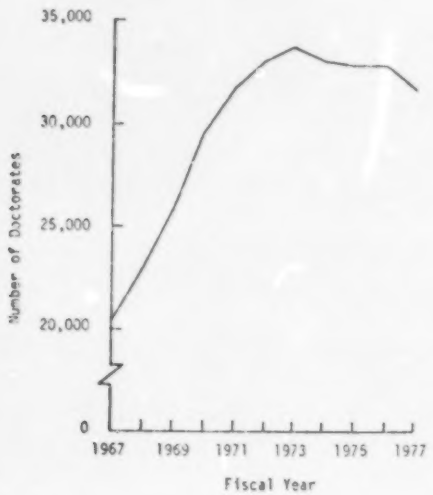


FIGURE 1
Doctorates Awarded by U.S. Universities, 1967-1977

Selected statistics from the 1977 Survey of Earned Doctorates and trends on doctorate recipients based on the Doctorate Records File are included in this report. The data were selected to illuminate the drop in doctorate recipients: trends by sex; by field; by Carnegie category of doctoral-granting institution; and by Roose-Andersen rating of doctoral department. The Summary Report for 1976 Doctorate Recipients presented trend data on postgraduation plans of doctorate recipients, with emphasis on those still seeking employment or postdoctoral study, and data on field switching from baccalaureate field to Ph.D. field to field of first planned postdoctoral employment.

PROPORTION OF WOMEN PH.D.'S INCREASES

The trend for an increasing proportion of doctorates to be women started in 1965, when 10.8%[2] of the doctorates were women, and reached an all-time high of 24.8% in 1977. Growth in number of women Ph.D.'s appears to be decreasing, however. The 1977 figure is only 162 greater than that for 1976[3], the smallest increment in the past decade. For men, however, the decrease of 1,426 from 1976 to 1977 is the largest annual decrease since their peak year, 1972.

From Figure 2 it can be seen that the number of men Ph.D.'s decreased from 1976 to 1977 in all fields and that the number of women Ph.D.'s dropped slightly in the humanities and the life science. The number of women Ph.D.'s in the other fields — education, social sciences, physical sciences, professional fields and engineering — continued to increase. The total number of Ph.D.'s dropped from 1976 to 1977 in all seven of the broad fields. The largest percentage decrease occurred in the professional fields, which dropped by 9.1% (from 1,474 in 1976 to 1,340 [Table 1] in 1977), followed by a 6.8% decrease (from 2,833 in 1976 to 2,641 in 1977) in engineering[4].

1 Includes survey responses received after publication of earlier Summary Reports.
2 Data for 1920-1975 given in Summary Report 1975: Doctorate Recipients from United States Universities, p. 4, National Research Council, Washington, D. C., 1976.
3 Data for 1966-1976 U.S. doctorates by broad field and sex given in Summary Report 1976: Doctorate Recipients from United States Universities, p. 5, National Research Council, Washington, D. C., 1977. Text statistics include survey responses for 1976 received from seven women and six men after publication of the 1976 Summary Report.
4 Total for 1976 adjusted to correspond to 1977 total which includes environmental engineers, who were formerly included in the environmental sciences.

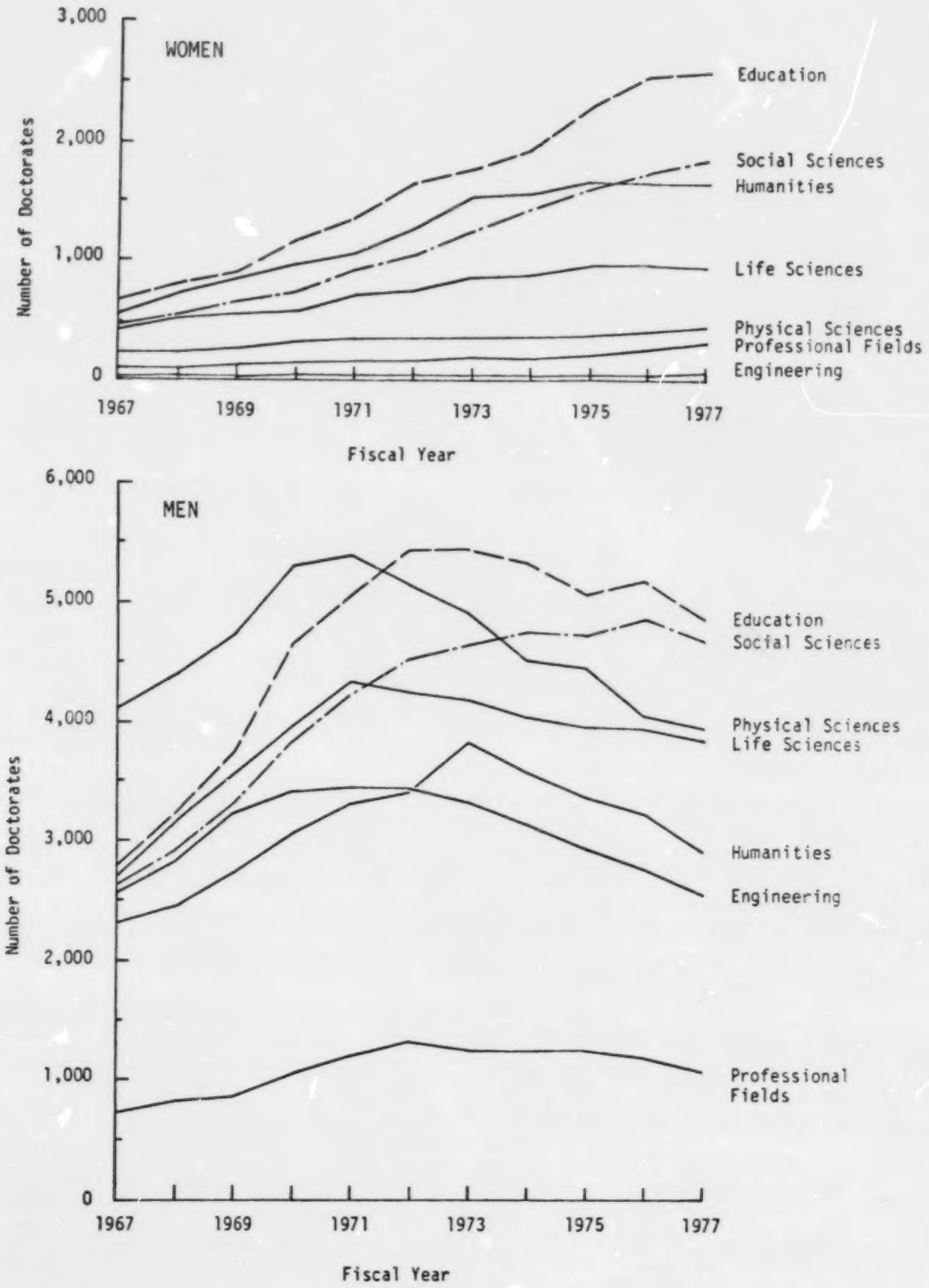


FIGURE 2
Number of United States Doctorates by Broad Field, 1967-1977

A DECREASE IN NUMBER OF DOCTORATES AWARDED TO MEN IS FOUND IN SEVERAL CATEGORIES OF UNIVERSITIES

To determine whether the decrease in number of Ph.D.'s is distributed evenly across the doctorate-granting institutions, Text Table B and Figure 3 provide data for the six largest broad fields on number of Ph.D.'s by Carnegie classification[1] of institution, by sex. The Carnegie classification system is based on statistics on federal financial support and degrees awarded. Abbreviated definitions[2] of the Carnegie categories used in this report are given below:

Research Universities I: The 50 leading universities by federal financial support of academic sciences in at least two of the three academic years 1968-1969, 1969-1970 and 1970-1971 provided they awarded at least 50 Ph.D.'s in 1969-1970.

Research Universities II: Included in the 100 leading institutions by federal financial support in at least two of the above three years, awarded at least 50 Ph.D.'s in 1969-1970 or among the leading 50 institutions in total number of Ph.D.'s awarded from 1960-1961 to 1969-1970.

Doctoral-Granting Universities I: Awarded 40 or more Ph.D.'s in 1969-1970 or received at least $3 million in federal financial support in 1969-1970 or 1970-1971 and granted more than 20 Ph.D.s.

Doctoral-Granting Universities II: Awarded at least 10 Ph.D.'s in 1969-1970 or one of a few new institutions where expansion of the doctoral program is anticipated.

All Other Rated: Includes all other institutions that were classified by the Carnegie Commission. These are primarily, but not exclusively, professional schools and specialized institutions.

The Research Universities I category, the largest in terms of number of Ph.D's, has been further subdivided by type of control into the group of 30 public institutions and 22 private institutions in this category to provide analysis groups more comparable in size.

Of the six largest fields, those showing large decreases in numbers of men Ph.D.'s are physical sciences, engineering, life sciences, humanities and education. The graphs for these fields generally show decreases in number of men Ph.D.'s for the four categories of institutions: Public Research I, Private Research I, Research II and Doctoral-Granting I and II. The number of men receiving doctorates from institutions in the "All Other" category tended to increase slightly for these fields except for the field of education, where there was a sizable increase followed by a drop from 1976 to 1977.

In the social sciences there has been only a small drop in the number of men Ph.D.'s during 1974-1977 but again the decrease is reflected in all the categories except "All Other". Of note is the number of doctorates in social sciences granted to men by the Doctoral-Granting I and II institutions. The number in this category exceeded the number in the Research II category in 1976 and 1977.

In the life sciences, the Research II institutions consistently granted more doctorates to men than did the Research I private institutions, an inversion of the relative position of these two categories in the physical sciences, engineering, social sciences and humanities. The pattern for education shows additional inversions of institutional categories.

The graphs for women Ph.D.'s differ from those for men primarily in that the lines are still ascending or, for the life sciences and the humanities, only starting to drop. The relative position of the lines on the graphs for different Carnegie categories for a field are essentially the same for women as for men. Because of the small numbers of women Ph.D.'s in some fields, there are more pronounced peaks and troughs in the graphs for women.

The proportion of women receiving Ph.D.'s from private Research I institutions is nearly equal to the proportion receiving Ph.D.'s from public Research I institutions for each of the fields: physical sciences, engineering and the humanities. On the other hand, public Research I institutions award by far the largest number of Ph.D.'s to men in these fields. In each of the six fields the proportion of women receiving Ph.D.'s from private Research I institutions is greater than the corresponding proportion of men.

1 Carnegie Commission on Higher Education, A Classification of Institutions of Higher Education. Berkeley: Carnegie Foundation for the Advancement of Teaching, 1973

2 Used with permission. Copyright © 1973 by the Carnegie Foundation for the Advancement of Teaching.

MEN

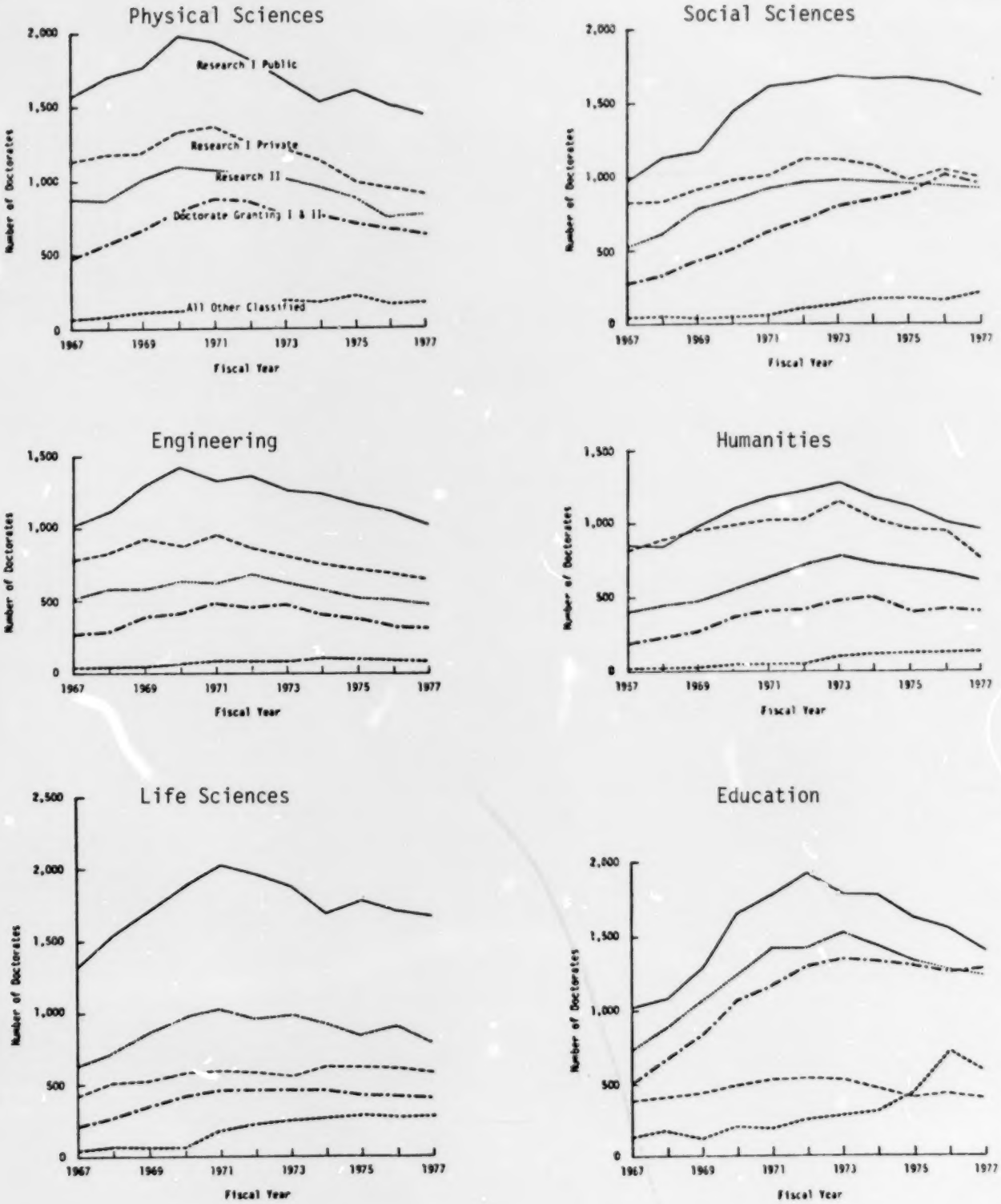
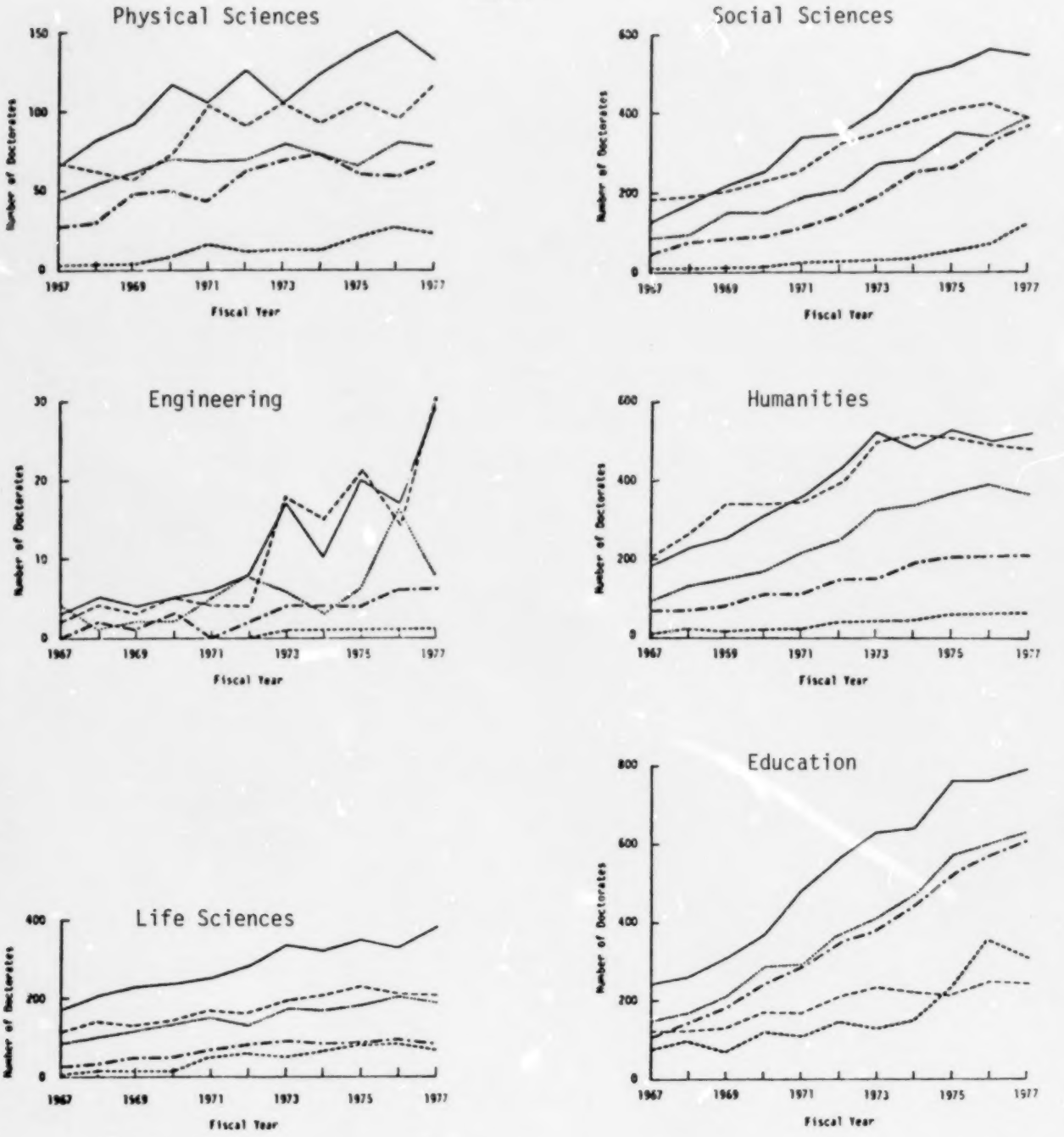


FIGURE 3
Doctorate Recipients by Carnegie Classification of Doctorate-Granting Institution, Sex and Field of Doctorate, 1967-1977

WOMEN*



* Scales vary because of large differences in field totals.

FIGURE 3 Continued

TEXT TABLE B
Distribution of Doctorate Recipients by Carnegie Classification of Doctorate-Granting Institution, Sex and Field of Doctorate, 1967-1977

Carnegie Classification	MEN 1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	WOMEN 1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Physical Sciences																						
Total 1/	4125	4409	4722	5307	5398	5169	4927	4586	4452	4089	3938	209	232	262	320	341	367	381	385	403	420	431
Research I Public	1576	1701	1765	1970	1946	1834	1699	1544	1640	1531	1441	66	82	92	118	107	129	109	125	140	152	134
Research I Private	1113	1172	1195	1331	1365	1271	1236	1147	1007	961	907	68	63	58	72	105	91	108	94	107	96	119
Research II	879	873	1006	1103	1084	1056	1023	959	892	754	762	44	54	61	72	69	70	79	74	67	81	78
Doct. Granting I & II	488	575	658	792	868	860	781	761	707	668	648	28	30	48	51	44	64	71	75	66	62	69
All Other Classif.	66	82	90	100	129	145	179	160	192	159	168	3	2	3	7	14	11	14	14	22	26	24
Engineering																						
Total 1/	2595	2836	3241	3418	3485	3481	3316	3114	2950	2779	2567	9	12	10	15	15	22	46	33	52	54	74
Research I Public	1016	1117	1299	1425	1340	1380	1271	1252	1186	1128	1036	3	5	4	5	6	8	17	10	20	17	29
Research I Private	791	825	924	881	963	878	838	766	730	703	651	2	4	3	5	4	4	18	15	21	14	30
Research II	501	562	575	636	631	680	640	590	540	519	481	4	1	2	2	5	8	6	3	6	16	8
Doct. Granting I & II	258	289	394	422	480	465	479	403	393	327	313	0	2	1	3	0	2	4	4	4	6	6
All Other Classif.	28	43	49	54	71	78	88	103	101	92	86	0	0	0	0	0	0	1	1	1	1	1
Life Sciences																						
Total 1/	2726	3188	3559	3989	4357	4214	4136	3965	3956	3921	3810	418	510	568	588	715	731	868	867	950	959	957
Research I Public	1333	1541	1713	1889	2013	1940	1872	1684	1769	1702	1668	176	207	231	239	251	284	337	321	351	332	383
Research I Private	433	534	533	580	596	569	557	608	611	601	584	116	142	135	141	171	160	193	209	232	216	208
Research II	658	730	878	985	1058	971	983	936	842	900	808	87	100	119	137	155	129	173	171	181	210	184
Doct. Granting I & II	225	274	351	439	464	457	450	455	417	407	411	25	37	56	55	70	82	91	82	87	97	81
All Other Classif.	61	72	63	66	186	221	246	256	280	260	279	10	14	15	9	57	60	51	63	84	87	77
Social Sciences																						
Total 1/	2653	2939	3303	3827	4254	4553	4688	4725	4710	4851	4674	448	552	662	737	919	1050	1245	1446	1599	1734	1830
Research I Public	974	1124	1163	1445	1608	1645	1679	1665	1669	1647	1553	126	176	218	248	338	355	405	498	520	565	551
Research I Private	821	824	908	975	1007	1130	1108	1081	987	1049	999	180	196	201	231	258	326	349	384	414	425	393
Research II	525	610	774	843	930	966	982	975	935	954	913	86	93	145	149	190	204	268	280	351	341	394
Doct. Granting I & II	285	331	420	502	619	703	796	848	890	1035	984	46	75	85	92	109	140	192	247	262	329	369
All Other Classif.	48	49	38	62	90	106	121	150	178	165	223	10	12	13	17	24	24	30	37	50	71	121
Humanities																						
Total 1/	2311	2491	2728	3095	3313	3434	3815	3593	3360	3207	2903	561	719	838	972	1063	1272	1546	1576	1686	1673	1656
Research I Public	851	853	969	1117	1187	1227	1273	1186	1120	1009	969	184	232	258	316	360	428	524	487	529	505	521
Research I Private	822	898	974	994	1029	1034	1149	1038	962	957	764	201	261	338	344	346	393	499	519	508	495	486
Research II	405	454	477	564	641	704	784	738	713	671	607	91	129	147	172	218	256	325	338	373	395	367
Doct. Granting I & II	201	244	283	361	403	413	494	502	429	436	414	74	72	80	113	116	154	156	188	213	210	218
All Other Classif.	30	39	24	54	52	54	110	126	132	132	144	11	25	15	27	23	41	41	42	63	67	64
Education																						
Total 1/	2791	3224	3746	4671	5085	5437	5455	5301	5063	5186	4864	690	801	903	1186	1346	1646	1782	1939	2295	2540	2534
Research I Public	1010	1074	1280	1652	1785	1925	1790	1774	1609	1543	1390	244	265	309	372	489	561	626	644	763	762	789
Research I Private	387	412	444	497	532	540	535	468	415	436	398	121	123	132	168	165	212	233	224	214	251	240
Research II	739	872	1057	1237	1417	1411	1	1421	1312	1261	1221	148	173	211	284	295	374	414	474	570	600	629
Doct. Granting I & II	508	673	822	1066	1156	1299	1	1329	1309	1253	1274	101	145	180	243	290	355	379	441	520	570	613
All Other Classif.	147	193	143	219	195	262	283	309	418	693	581	76	95	71	119	107	144	130	156	228	357	313

1/ Total includes doctorate recipients from institutions not classified by Carnegie Commission.

DISTINGUISHED GRADUATE PROGRAMS TEND TO SHOW SMALLER PERCENTAGE DECREASES IN NUMBER OF PH.D.'S THAN PROGRAMS WITH LOWER RATINGS

To obtain a sharper focus on the locus of the decrease in number of Ph.D.'s, Text Table C and Figure 4 provide data for 10 of the 36 disciplines for which Roose-Andersen[1] ratings of graduate programs are available. The top Roose-Andersen ratings for departments are "Distinguished" (those with ratings of 4.00 and higher) and "Strong" (3.00-3.99). For the purpose of this report, programs receiving scores below 3.00 are included in a category of "Other Rated" programs. The disciplines included in Table C were selected from the 12 disciplines showing the largest percentage drop between the peak year in number of Ph.D.'s and 1977. Although this group included four engineering fields, two of them (chemical and civil) were omitted to maintain a wide spread of disciplines while meeting space limitations allowing only 10 fields.

In Figure 4, some similarities are discernible for the disciplines of mathematics, physics, chemistry, mechanical engineering and zoology. In each of these the largest number of Ph.D.'s was awarded by programs in the "Other Rated" category and the largest drop in number of Ph.D.'s from peak year to 1977 occurred in the "Other Rated" programs. The largest percentage decrease in Ph.D.'s occurred in the "Strong" programs except in the fields of zoology and mechanical engineering where it was in the "Other Rated" programs. The percentage decrease in Ph.D.'s for "Distinguished" programs was smaller than the decrease for "Strong" and "Other Rated" programs except in mechanical engineering. In mathematics and physics, the "Distinguished" programs and the "Strong" programs award approximately equal numbers of doctorate degrees. The number of Ph.D.'s from "Not Rated" programs grew from 1967 to 1973 or 1974 and then dropped slightly in all five fields.

The largest numbers of Ph.D.'s in entomology, geography and the classics are granted by the "Strong" programs, followed by the "Other Rated" programs. The "Distinguished" programs and the "Not Rated" programs grant many fewer Ph.D.'s than the "Strong" and "Other Rated" programs, and in each of the three fields, the "Other Rated" programs have surpassed or equalled the "Distinguished" programs in number of Ph.D.'s during the period 1967-1977. In each of the three fields, the three rated categories of programs have shown decreases in number of Ph.D.'s but the numbers of Ph.D.'s involved are too small for meaningful comparisons between categories.

In electrical engineering the number of Ph.D.'s awarded by the "Distinguished" programs is consistently smaller than the number for each of the other three categories. All three rated categories showed a drop of over [illegible] in number of Ph.D.'s from peak year to 1977, the largest numerical drop occurring in the "Other Rated" category.

In the field of German, the "Distinguished" category showed the smallest percentage drop of the three rated categories of programs. The "Not Rated" category grew rapidly during 1967-1976 but dropped in 1977.

In summary, in six of the seven largest fields analyzed, the trend in number of doctorates granted by distinguished departments has decreased at a slower rate than the trend in lesser rated departments. Moreover, the proportion of doctorates granted by the top-rated departments for fields shown in Text Table C has been relatively stable from 1967 to 1977. In fact, for the nine fields other than classics the distinguished departments' share of doctorates granted has changed by less than three percentage points from the peak year in number of Ph.D.'s to 1977. From Text Table C these changes, by field, are found to be: mathematics, 2.9%; physics, -0.7%; chemistry, 0.6%; electrical engineering, 1.6%; mechanical engineering, -1.3%; zoology, 1.8%; entomology, -1.0%; geography, -1.7%; German, 2.9%; and classics, -7.2%.

1 Roose, Kenneth D. and Charles J. Andersen, A Rating of Graduate Programs, American Council on Education, Washington, D. C., 1970.

TEXT TABLE C
Trends in Doctorates Granted by Departments Grouped by Roose-Andersen Ratings for Selected Fields, 1967-1977

Roose-Andersen Rating	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Mathematics											
Total	830	970	1065	1224	1238	1281	1232	1209	1147	1003	959
4.00 - 5.00 [1]	219	247	241	283	265	266	261	262	277	243	228
3.00 - 3.99 [2]	204	239	244	288	294	295	307	261	257	216	193
Other Rated	386	448	499	566	565	564	534	527	467	395	395
Not Rated	21	36	81	87	114	154	130	159	146	149	143
Physics											
Total	1248	1334	1342	1544	1624	1505	1457	1204	1167	1006	1029
4.00 - 5.00	386	342	334	344	396	341	331	273	251	251	244
3.00 - 3.99	281	336	311	382	375	345	317	274	236	226	218
Other Rated	544	590	605	717	707	657	628	511	515	448	417
Not Rated	37	66	92	101	146	162	181	146	155	161	150
Chemistry											
Total	1774	1797	1962	2238	2212	2017	1855	1796	1776	1624	1570
4.00 - 5.00	346	349	372	378	365	323	300	331	322	309	275
3.00 - 3.99	519	557	545	650	644	567	499	450	470	416	416
Other Rated	794	749	882	1003	935	881	817	770	722	668	649
Not Rated	115	142	163	207	268	246	239	245	262	231	230
Electrical Engineering											
Total	675	740	824	856	862	815	787	678	612	591	544
4.00 - 5.00	140	123	145	125	141	151	126	123	117	110	98
3.00 - 3.99	204	246	270	286	249	224	203	196	176	177	152
Other Rated	174	213	230	246	268	231	240	198	160	157	139
Not Rated	159	158	179	199	204	209	218	161	159	147	155
Mechanical Engineering											
Total	537	595	642	635	613	616	541	544	487	417	372
4.00 - 5.00	93	77	98	77	87	70	64	71	75	70	52
3.00 - 3.99	147	200	171	186	172	138	141	126	128	93	96
Other Rated	269	270	315	306	262	264	242	256	192	174	159
Not Rated	28	48	58	66	92	94	94	91	92	80	65
Zoology											
Total	231	312	283	341	355	356	331	259	271	258	254
4.00 - 5.00	33	31	28	34	30	27	28	19	25	27	24
3.00 - 3.99	66	108	99	91	108	90	89	60	64	63	75
Other Rated	123	152	135	183	185	206	174	137	144	127	120
Not Rated	9	21	21	33	32	33	40	43	38	41	35
Entomology											
Total	146	154	176	173	218	195	184	175	170	145	153
4.00 - 5.00	19	13	9	3	15	7	11	8	10	8	9
3.00 - 3.99	69	82	95	86	99	81	92	83	80	68	58
Other Rated	44	39	55	63	76	80	52	49	57	46	58
Not Rated	14	20	17	26	28	27	29	35	23	23	28
Geography											
Total	75	87	114	137	158	177	215	195	187	155	155
4.00 - 5.00	3	5	6	14	12	17	19	19	15	9	11
3.00 - 3.99	41	50	60	64	73	84	80	80	76	57	58
Other Rated	31	30	46	50	63	52	74	57	55	53	48
Not Rated	0	2	2	9	10	24	42	39	41	36	38
German											
Total	103	119	139	139	160	173	195	169	164	178	140
4.00 - 5.00	29	32	36	44	36	40	43	37	35	32	35
3.00 - 3.99	36	39	53	46	63	55	72	49	52	48	45
Other Rated	38	42	48	44	48	57	62	60	54	56	34
Not Rated	0	6	2	5	13	21	28	23	23	42	26
Classics											
Total	71	103	82	86	100	106	85	88	93	79	60
4.00 - 5.00	16	19	18	20	20	20	10	19	15	12	7
3.00 - 3.99	28	56	40	40	40	46	43	36	38	34	27
Other Rated	20	21	24	20	32	36	28	29	32	23	19
Not Rated	7	7	0	6	2	4	4	4	8	10	7

1 "Distinguished" programs
2 "Strong" programs

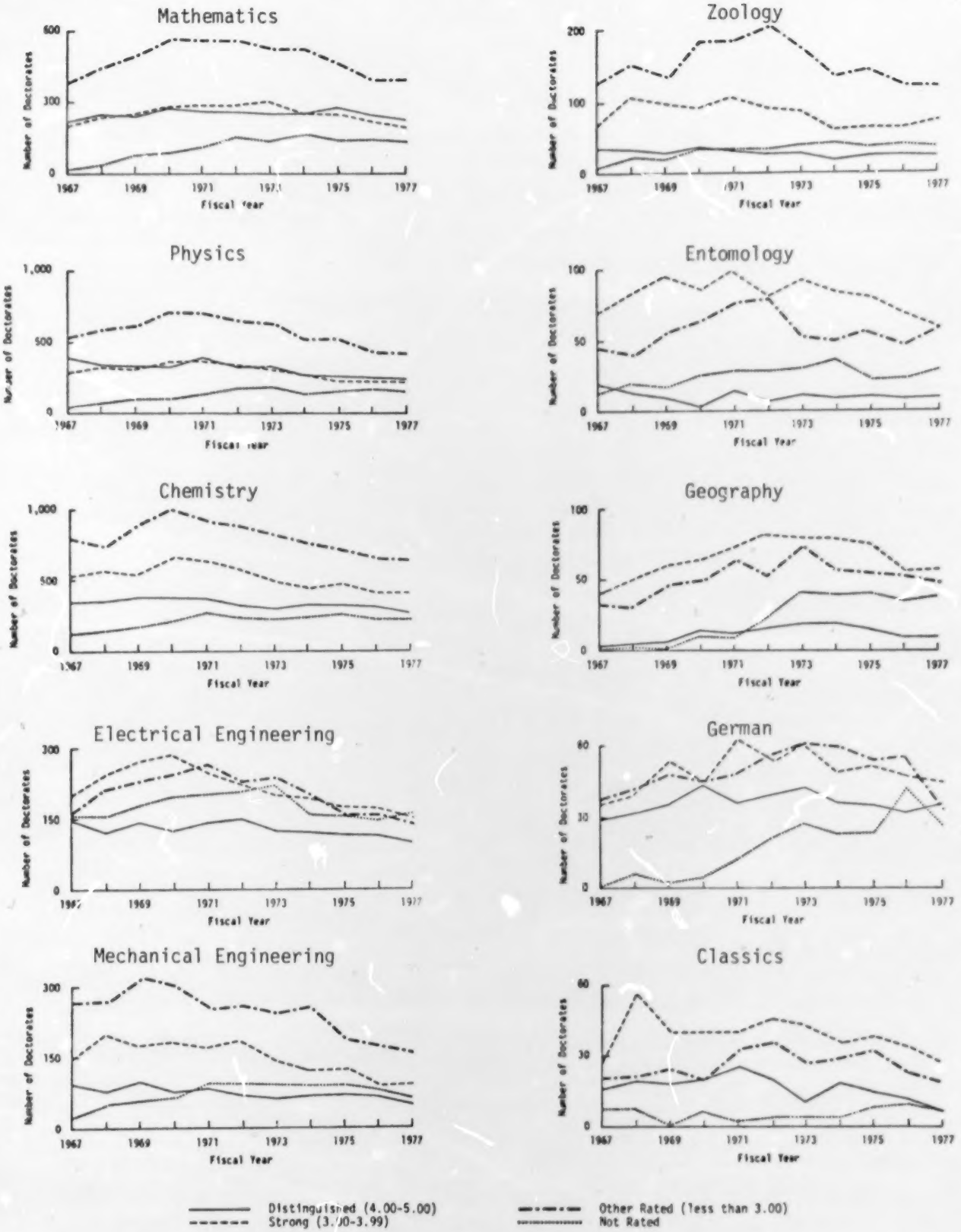


FIGURE 4
Trends in Doctorates Granted by Departments Grouped by Roose-Andersen Ratings for Selected Fields, 1967-1977

EXPLANATION OF FIVE BASIC TABLES

TABLE 1 Number of Doctorate Recipients by Sex and Subfield, FY 1977

TABLE 1A Number of Doctorate Recipients by Citizenship, Racial/Ethnic Group and Subfield, FY 1977

TABLE 2 Statistical Profile of Doctorate Recipients by Sex and by Field of Doctorate, FY 1977 (three tables)

TABLE 3 Percentage of FY 1977 Doctorate Recipients by Sources of Support in Graduate School, by Sex and Summary Field

TABLE 4 Number of FY 1977 Doctorate Recipients by Sex, State of Doctoral Institution and Summary Field

TABLE 5 Statistical Profile of Doctorate Recipients by Racial or Ethnic Group and U.S. Citizenship Status, FY 1977

Table titles and headings are generally self-explanatory, but a few terms need special definition or explanation. The survey questionnaire is reproduced on p. 30.

Table 1A:
This table is being included for the first time in response to numerous requests for data about the availability of minority Ph.D.'s.

Table 2:
There are three 2-page tables; one contains data about all doctorate recipients of FY 1977 and the other two present data by sex. This table provides data by field and also by broader summary field. Refer to inside back cover for the codes included in each broad field and the Specialties List on page 32 for the codes and the names of each subfield. The doctoral fields that head Table 2 are the same as those in the 1972-76 reports except for the Environmental Sciences field. For 1972-76 the Environmental Sciences were included in the Life Sciences summary field. The Environmental Sciences are now incorporated in the Earth, Environmental and Marine Sciences field which is included in the broader summary field of Physical Sciences.

"Median Age at Doctorate" --One-half received the doctorate at this age or younger.

"Percent with Master's" --This indicates the percentage of doctorate recipients in a field who received a master's degree in any field before taking the doctorate.

"Median Time Lapse" --Total Time refers to total calendar time elapsed between year of baccalaureate and year of doctorate; Registered Time refers to the total time registered in a university between baccalaureate and doctorate.

Postgraduation plans of the doctorate recipients are grouped as: Postdoctoral study (fellowship, research associateship, traineeship, other), Employment (educational institution, industry, etc.), or Unknown. The sum of the columns of percentages totals 100% with allowance for rounding. For example, 4.4% of all the engineers plan to go to postdoctoral fellowships, 9.1% to research associateships, 0.8% to traineeships, 0.6% plan on some other form of postdoctoral study support; 78.8% plan on employment and 6.3% did not indicate their postgraduation plans. The percentages listed by type of employer (educational institution, industry, etc.) total to the 78.8% planning on employment.

Four lines of data, first included in the 1974 report, distinguish between individuals who have definite postgraduation plans (item 5: "Have signed contract or made definite commitment" in the survey questionnaire) and those who are still seeking employment or postdoctoral study (item 5. negotiating, seeking, or other). These four lines when added to the prior line "status unknown" total 100%. The two lines for definite postdoctoral study and seeking postdoctoral study add to the total percentage planning study and the two lines for definite employment and seeking employment add to the total percentage planning employment.

Percentages showing the distribution of doctorate recipients by work activity and by region of employment are based on those who have a definite employment commitment. They exclude those still seeking employment and those planning postdoctoral study as described in the categories above. These data differ from Summary Reports prior to 1974 which included all individuals planning on employment, i.e., those seeking as well as those having definite employment.

Table 3:
Data in Table 3 describe sources of financial support during graduate school. The question was answered by 29,99[illegible] (94.7%) of the FY 1977 doctorate recipients. The data in the table should be interpreted as follows: 285 male doctorate recipients in the physical sciences reported financial support from NSF fellowships during graduate school. This number is 7.6% of the male physical sciences doctorates who answered the question, and it is 33.7% of the males in all fields who reported NSF fellowship support. Since students indicate multiple sources of support, the vertical percentages sum to more than 100%.

The 1977 data on sources of support are not comparable with data shown in Table 3 in earlier years because of a change in item P in the survey questionnaire. In previous years, the question was worded "Please check each source from which you received some support during graduate study. Check as many sources as apply." In 1977 the question was modified to request indication of primary and secondary sources of support in addition to all other sources. It appears that many respondents who used the new form provided information only on primary and secondary sources of support so that almost every percentage in Table 3 is lower for 1977 than for 1976.

There is some evidence for this inference since data are available for 11,674 (37%) of the respondents who used the old forms in 1977. Of those who used the new forms, 58% showed only 1 or 2 sources of support whereas only 36% of those reporting on the old forms showed only 1 or 2 sources of support. A version of Table 3 using only the responses on the old forms and another version based only on the new form have been prepared. These tables are available from the Commission on Human Resources on request. The percentages of doctorates receiving all forms of support are generally greater in the table based on old forms. Table 3 is included in the Summary Report this year, even though there is ambiguity concerning the numbers in the report, because the table still provides useful information. There is no reason to question the relative position of well-spaced numbers, e.g., the field with the largest number of Ph.D.'s with support from NSF fellowships was the physical sciences and the source of support most frequently cited by Ph.D.'s in the physical sciences was a teaching assistantship.

Table 4:
Table 4 shows the number of persons receiving a doctorate from universities in each of the 50 states, the District of Columbia and Puerto Rico.

Table 5:
The 1973 Summary Report was the first to include data for racial and ethnic groups. The tables in that report stimulated many requests for more detailed data by individual racial or ethnic group. Such data are provided in Table 5, first included in the 1974 Summary Report. Table 5 contains data by racial or ethnic group and by U.S. citizenship status for selected variables from Tables 2 and 3. Comparisons between the 1973 data and data for 1974-76 are somewhat tenuous because of the large number of cases (8,592) for which racial or ethnic data were unavailable in 1973.

In 1977, item H on racial or ethnic group in the survey questionnaire was revised to coincide with the question format recommended by the Federal Interagency Committee on Education and adopted by the Office of Management and Budget for use in federally sponsored surveys. The Puerto Rican and Chicano groups which were previously reported separately are now combined in the Hispanic group. The Hispanic group may now include Whites and Blacks of Hispanic origin who under the earlier classification system would have classified themselves as White, Black or Other. In addition, the Asian group (formerly called Oriental) has been clearly defined to include Pacific Islanders and persons with origins in the Indian Subcontinent. Some Pacific Islanders may have classified themselves as "Other" in earlier years and persons with origins in the Indian Subcontinent were included in the White group on the prior form and earlier may have classified themselves as "Other". *These changes in categories can affect the continuity of the time series for all the racial/ethnic groups in the report.*

TABLE 1
NUMBER OF DOCTORATE RECIPIENTS BY SEX AND SUBFIELD, FY 1977

SUBFIELD OF DOCTORATE	NUMBER OF DOCTORATES		
	MEN	WOMEN	TOTAL
TOTAL ALL FIELDS	23827	7845	31672
PHYSICAL SCIENCES	3938	431	4369
MATHEMATICS	831	128	959
ALGEBRA	71	17	88
ANALYSIS AND FUNCTIONAL ANALYSIS	134	18	152
GEOMETRY	24	2	26
LOGIC	13	4	17
NUMBER THEORY	27	5	32
PROBABILITY, MATH STATISTICS	138	21	159
TOPOLOGY	63	7	70
COMPUTING THEORY AND PRACTICE	88	13	101
OPERATIONS RESEARCH	37	5	42
APPLIED	104	9	113
MATHEMATICS, GENERAL	78	11	89
MATHEMATICS, OTHER	54	16	70
PHYSICS AND ASTRONOMY	1085	64	1149
ASTRONOMY	56	7	63
ASTROPHYSICS	55	2	57
ATOMIC AND MOLECULAR	100	6	106
ELECTROMAGNETISM	9		9
ACOUSTICS	12		12
FLUIDS	14		14
PLASMA	70	2	72
OPTICS	30	1	31
THERMAL	7		7
ELEMENTARY PARTICLES	129	9	138
NUCLEAR STRUCTURE	89	4	93
SOLID STATE	245	12	257
PHYSICS, GENERAL	163	10	173
PHYSICS, OTHER	106	11	117
CHEMISTRY	1390	180	1570
ANALYTICAL	161	13	174
INORGANIC	169	29	198
ORGANIC	429	48	477
NUCLEAR	18	6	24
PHYSICAL	298	41	339
THEORETICAL	33	5	38
AGRICULTURAL AND FOOD	6		6
PHARMACEUTICAL	45	5	50
POLYMER	52	2	54
CHEMISTRY, GENERAL	124	23	147
CHEMISTRY, OTHER	55	8	63
EARTH, ENVIRONMENTAL AND MARINE SCI	632	59	691
MINERALOGY, PETROLOGY	53	6	59
GEOCHEMISTRY	49	7	56
STRATIGRAPHY, SEDIMENTATION	40	2	42
PALEONTOLOGY	23	3	26
STRUCTURAL GEOLOGY	21	1	22
GEOPHYSICS (SOLID EARTH)	66	7	73
GEOMORPHOL, GLACIAL GEOLOGY	22		22
HYDROLOGY	23		23
OCEANOGRAPHY	107	5	112
ATMOSPHERIC PHYSICS AND CHEMISTRY	15		15
ATMOSPHERIC DYNAMICS	29	3	32
ATMOSPHERIC SCIENCES, OTHER	39	6	45
ENVIRONMENTAL SCIENCES, GENERAL	24	1	25
ENVIRONMENTAL SCIENCES, OTHER	22	6	28
APPL GEOL, GEOL ENG, ECON GEOL	18	2	20
FUEL TECHNOL, PETROL ENG	5		5
EARTH SCIENCES, GENERAL	40	4	44
EARTH SCIENCES, OTHER	36	6	42

SUBFIELD OF DOCTORATE	NUMBER OF DOCTORATES		
	MEN	WOMEN	TOTAL
ENGINEERING	2567	74	2641
AERONAUTICAL AND ASTRONAUTICAL	112	3	115
AGRICULTURAL	33		33
BIOMEDICAL	75		75
CIVIL	261	7	268
CHEMICAL	297	9	306
CERAMIC	26	3	29
COMPUTER	113	9	122
ELECTRICAL	452	9	461
ELECTRONICS	80	3	83
INDUSTRIAL	68	5	73
NUCLEAR	103	2	105
ENGINEERING MECHANICS	99	3	102
ENGINEERING PHYSICS	19		19
MECHANICAL	267	3	270
METALLURGY AND PHYSICAL MET	91	1	92
SYSTEMS DESIGN, SYSTEMS SCIENCE	71		71
OPERATIONS RESEARCH	72	4	76
FUEL TECH, PETROLEUM	17	1	18
SANITARY AND ENVIRONMENTAL	65	1	66
MINING	2		2
MATERIALS SCIENCE	121	6	127
ENGINEERING, GENERAL	31	2	33
ENGINEERING, OTHER	92	3	95
LIFE SCIENCES	3810	957	4767
BIOLOGICAL SCIENCES	2443	729	3172
BIOCHEMISTRY	473	135	608
BIOPHYSICS	126	16	142
BIOMETRICS, BIOSTATISTICS	39	13	52
ANATOMY	93	23	116
CYTOLOGY	25	12	37
EMBRYOLOGY	12	7	19
IMMUNOLOGY	68	33	101
BOTANY	126	32	158
ECOLOGY	144	19	163
HYDROBIOLOGY	13	1	14
MICROBIOLOGY AND BACTERIOLOGY	226	86	312
PHYSIOLOGY, ANIMAL	264	55	319
PHYSIOLOGY, PLANT	32	11	43
ZOOLOGY	204	50	254
GENETICS	95	45	140
ENTOMOLOGY	135	18	153
MOLECULAR BIOLOGY	99	32	131
NUTRITION AND/OR DIETETICS	37	45	82
BIOL SCIENCES, GENERAL	122	54	176
BIOL SCIENCES, OTHER	110	42	152
AGRICULTURAL SCIENCES	861	63	924
AGRONOMY	119	3	122
AGRICULTURAL ECONOMICS	136	6	142
ANIMAL HUSBANDRY	24	1	25
FOOD SCIENCE AND TECHNOLOGY	82	25	107
FISH AND WILDLIFE	64	2	66
FORESTRY	63	3	66
HORTICULTURE	56	4	60
SOILS AND SOIL SCIENCE	71	1	72
ANIMAL SCIENCE AND ANIMAL NUTRITION	97	4	101
PHYTOPATHOLOGY	71	11	82
AGRICULTURE, GENERAL	5	1	6
AGRICULTURE, OTHER	73	2	75
MEDICAL SCIENCES	506	165	671
PUBLIC HEALTH AND EPIDEMIOLOGY	69	37	106
VETERINARY MEDICINE	23	1	24
HOSPITAL ADMINISTRATION	7	1	8
NURSING	1	31	32
PARASITOLOGY	16	1	17
ENVIRONMENTAL HEALTH	21	4	25
PATHOLOGY	83	16	99
PHARMACOLOGY	154	42	196
PHARMACY	43	6	49
MEDICAL SCIENCES, GENERAL	13	5	18
MEDICAL SCIENCES, OTHER	76	21	97

TABLE 1. CONTINUED

SUBFIELD OF DOCTORATE	NUMBER OF DOCTORATES		
	MEN	WOMEN	TOTAL
SOCIAL SCIENCES (INCL PSYCH)	**4674**	**1830**	**6504**
ANTHROPOLOGY	250	136	386
COMMUNICATIONS	204	83	287
SOCIOLOGY	488	237	725
ECONOMICS	738	71	809
ECONOMETRICS	27	2	29
STATISTICS	31	5	36
GEOGRAPHY	128	27	155
AREA STUDIES	15	3	18
POLITICAL SCIENCE	511	102	613
PUBLIC ADMINISTRATION	143	29	172
INTERNATIONAL RELATIONS	85	11	96
URBAN AND REGIONAL PLANNING	65	14	79
SOCIAL SCIENCES, GENERAL	21	6	27
SOCIAL SCIENCES, OTHER	89	23	112
PSYCHOLOGY	1879	1081	2960
CLINICAL	582	332	914
COUNSELING AND GUIDANCE	174	89	263
DEVELOP AND GERONTOL	84	119	203
EDUCATIONAL	74	59	133
SCHOOL PSYCHOLOGY	79	68	147
EXPERIMENTAL	239	98	337
COMPARATIVE	14	8	22
PHYSIOLOGICAL	100	32	132
INDUSTRIAL AND PERSONNEL	68	13	81
PERSONALITY	33	29	62
PSYCHOMETRICS	15	4	19
SOCIAL	132	69	201
PSYCHOLOGY, GENERAL	159	102	261
PSYCHOLOGY, OTHER	126	59	185
HUMANITIES	**2903**	**1656**	**4559**
ART, HISTORY AND CRITICISM	69	83	152
HISTORY, AMERICAN	280	62	342
HISTORY, EUROPEAN	197	64	261
HISTORY, OTHER	244	85	329
HISTORY AND PHILOSOPHY OF SCIENCE	24	5	29
AMERICAN STUDIES	52	39	91
THEATRE AND THEATRE CRITICISM	64	21	85
MUSIC	301	103	404
SPEECH AS A DRAMATIC ART	37	24	61
ARCHEOLOGY	15	8	23
RELIGION	150	25	175
PHILOSOPHY	266	63	329
LINGUISTICS	117	73	190
COMPARATIVE LITERATURE	76	75	151
HUMANITIES, GENERAL	11	10	21
HUMANITIES, OTHER	25	24	49
LANGUAGES AND LITERATURE	975	892	1867
AMERICAN	130	92	222
ENGLISH	460	397	857
GERMAN	68	72	140
RUSSIAN	32	24	56
FRENCH	61	150	211
SPANISH AND PORTUGUESE	99	100	199
ITALIAN	12	10	22
CLASSICAL	37	23	60
OTHER LANGUAGES	76	24	100
PROFESSIONAL FIELDS	**1037**	**303**	**1340**
THEOLOGY	144	11	155
BUSINESS ADMINISTRATION	627	40	667
HOME ECONOMICS	13	63	76
JOURNALISM	15	3	18
SPEECH AND HEARING SCIENCES	75	71	146
LAW, JURISPRUDENCE	25	2	27
SOCIAL WORK	93	71	164
LIBRARY AND ARCHIVAL SCIENCE	31	36	67
PROFESSIONAL FIELDS, OTHER	14	6	20

SUBFIELD OF DOCTORATE	NUMBER OF DOCTORATES		
	MEN	WOMEN	TOTAL
EDUCATION	**4864**	**2584**	**7448**
FOUNDATIONS: SOCIAL, PHILOS	152	78	230
EDUCATIONAL PSYCHOLOGY	284	214	498
ELEMENTARY EDUCATION, GENERAL	71	116	187
SECONDARY EDUCATION, GENERAL	83	59	142
HIGHER EDUCATION	508	205	713
ADULT EDUC AND EXTENSION EDUC	125	48	173
EDUCATIONAL MEAS AND STATISTICS	81	37	118
CURRICULUM AND INSTRUCTION	412	343	755
EDUCATIONAL ADMIN AND SUPERVISION	1182	328	1510
GUIDANCE,COUNS,STUDENT PERSONNEL	438	222	660
SPECIAL ED (GIFTED,HANDICAPPED,ETC)	177	147	324
AUDIO-VISUAL MEDIA	63	16	79
TEACHING FIELDS	1288	771	2059
AGRICULTURE	24	1	25
ART	35	20	55
BUSINESS	42	23	65
ENGLISH	36	33	69
FOREIGN LANGUAGE	17	19	36
HOME ECONOMICS	1	30	31
INDUSTRIAL ARTS	37	2	39
MATHEMATICS	64	34	98
MUSIC	67	22	89
PHYS ED, HEALTH, AND REC	233	100	333
READING	51	83	134
SCIENCE	96	32	128
SOCIAL SCIENCE	32	17	49
SPEECH	8	6	14
VOCATIONAL	163	48	211
OTHER TEACHING FIELDS	25	38	63
EDUCATION, GENERAL	250	154	404
EDUCATION, OTHER	107	109	216
OTHER AND UNSPECIFIED	**34**	**10**	**44**

SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

TABLE 1A
NUMBER OF DOCTORATE RECIPIENTS BY CITIZENSHIP, RACIAL/ETHNIC GROUP AND SUBFIELD, FY 1977

SUBFIELD OF DOCTORATE	TOTAL DOCTORATES	NON-U.S. CITIZENS TEMP. VISAS	U.S. CITIZENS AND NON-U.S. WITH PERMANENT VISAS RACIAL/ETHNIC GROUP 1/						
			TOTAL	AMERICAN INDIAN	ASIAN	BLACK	HISPANIC 2/	WHITE	OTHER & UNKNOWN
TOTAL ALL FIELDS	32723/	3447	27371	215	907	1166	471	23411	1181
PHYSICAL SCIENCES	4369	477	3600	16	223	99	56	3051	210
MATHEMATICS	959	170	764	2	42	10	10	665	35
ALGEBRA	88	12	76		3		2	70	1
ANALYSIS AND FUNCTIONAL ANALYSIS	152	33	118	1	6	3	2	103	3
GEOMETRY	26	7	19		1	1		16	1
LOGIC	17	4	13					12	1
NUMBER THEORY	32	4	28					28	
PROBABILITY, MATH STATISTICS	159	31	126	1	12	1	2	108	2
TOPOLOGY	70	13	57		1	1	1	51	3
COMPUTING THEORY AND PRACTICE	101	12	89		3		1	80	5
OPERATIONS RESEARCH	42	10	31		4			26	1
APPLIED	113	17	95		7	3	2	79	4
MATHEMATICS, GENERAL	89	18	54		3	1		40	10
MATHEMATICS, OTHER	70	9	58		2			52	4
PHYSICS AND ASTRONOMY	1149	208	916	7	63	10	14	741	81
ASTRONOMY	63	2	61		2			52	7
ASTROPHYSICS	57	8	48		3			42	3
ATOMIC AND MOLECULAR	106	15	90	1	5	3	2	75	4
ELECTROMAGNETISM	9		9		2			6	1
ACOUSTICS	12	3	9				1	6	2
FLUIDS	14	2	12		1			11	
PLASMA	72	10	62	1	7			50	4
OPTICS	31	4	27		2		1	23	1
THERMAL	7	2	5	1	2			2	
ELEMENTARY PARTICLES	138	29	107		7	3	2	92	3
NUCLEAR STRUCTURE	93	14	79		6	1	1	64	7
SOLID STATE	257	57	200		13	3	2	164	18
PHYSICS, GENERAL	173	40	114	2	8			75	26
PHYSICS, OTHER	117	22	93	2	5			79	5
CHEMISTRY	1570	199	1342	5	97	22	20	1131	67
ANALYTICAL	174	8	166		10	4	1	145	6
INORGANIC	198	25	172	1	5	2	2	157	5
ORGANIC	477	49	428	2	29	5	5	372	15
NUCLEAR	24	3	21		1			19	1
PHYSICAL	339	40	294		24	7	6	243	14
THEORETICAL	38	8	30		1	1		27	1
AGRICULTURAL AND FOOD	6	1	5					5	
PHARMACEUTICAL	50	8	41		7		1	32	1
POLYMER	54	12	42	1	4	2	1	33	1
CHEMISTRY, GENERAL	147	36	90	1	9	1	4	55	20
CHEMISTRY, OTHER	63	9	53		7			43	3
EARTH, ENVIRONMENTAL AND MARINE SCI	691	100	578	2	21	2	12	514	27
MINERALOGY, PETROLOGY	59	4	54	1	2		1	48	2
GEOCHEMISTRY	56	3	52		3			45	4
STRATIGRAPHY, SEDIMENTATION	42	10	32					31	1
PALEONTOLOGY	26		26					26	
STRUCTURAL GEOLOGY	22	3	19				1	16	2
GEOPHYSICS (SOLID EARTH)	73	16	56		4		2	50	
GEOMORPHOL, GLACIAL GEOLOGY	22	1	21					21	
HYDROLOGY	23	8	15			1		13	1
OCEANOGRAPHY	112	12	99		5	1	1	87	5
ATMOSPHERIC PHYSICS AND CHEMISTRY	15	1	14	1				13	
ATMOSPHERIC DYNAMICS	32	6	26		1			25	
ATMOSPHERIC SCIENCES, OTHER	45	8	35		2		3	28	2
ENVIRONMENTAL SCIENCES, GENERAL	25	2	22		2		1	17	2
ENVIRONMENTAL SCIENCES, OTHER	28	2	25					24	1
APPL GEOL, GEOL ENG, ECON GEOL	20	3	17				1	15	1
FUEL TECHNOL, PETROL ENG	5	2	1					1	
EARTH SCIENCES, GENERAL	44	9	34		1		1	29	3
EARTH SCIENCES, OTHER	42	10	30		1		1	25	3

1/ For more detailed explanations of racial/ethnic groups see item H on questionnaire on page 30.
2/ See definition on page 30. The definition used in this survey is not consistent with the guidance received from OMB in July 1977, subsequent to this survey, which defines "Hispanic" more restrictively to exclude persons from Portugal and to include only those persons from Central and South America who are of Spanish origin, descent or culture. Under the revised definition persons from Brazil, Guiana, Surinam, Trinidad, and Belize would be classified according to their race, and would not necessarily be included in the Hispanic category.
3/ Includes 854 individuals who did not report their citizenship at time of doctorate.

TABLE A. CONTINUED

SUBFIELD OF DOCTORATE	TOTAL DOCTORATES	NON-U.S. CITIZENS TEMP. VISAS	U.S. CITIZENS AND NON-U.S. WITH PERMANENT VISAS RACIAL/ETHNIC GROUP [1]					
			TOTAL	AMERICAN INDIAN	ASIAN	BLACK	HISPANIC	WHITE	OTHER & UNKNOWN
ENGINEERING	**2691**	**773**	**1793**	**12**	**248**	**15**	**22**	**1412**	**84**
AERONAUTICAL AND ASTRONAUTICAL	115	45	68	1	6		2	58	1
AGRICULTURAL	33	15	17		1			16	
BIOMEDICAL	75	8	66		6		1	55	4
CIVIL	265	108	157	1	25		2	120	9
CHEMICAL	306	97	204	1	37	1	5	148	12
CERAMIC	29	5	24		1			23	
COMPUTER	122	30	92		16	1	1	72	2
ELECTRICAL	461	117	323	2	57	5	4	235	20
ELECTRONICS	83	24	59	1	12	1		43	2
INDUSTRIAL	73	22	48		5	1	2	37	3
NUCLEAR	105	23	77		11	1		63	2
ENGINEERING MECHANICS	102	28	73		15			56	2
ENGINEERING PHYSICS	19	2	17			1	1	14	1
MECHANICAL	270	80	178		17	1	2	154	4
METALLURGY AND PHYSICAL MET	92	27	64		6		53		5
SYSTEMS DESIGN, SYSTEMS SCIENCE	71	22	47	1	5	1	1	39	
OPERATIONS RESEARCH	76	21	51		3			47	1
FUEL TECH, PETROLEUM	18	9	9	2	2	1		3	1
SANITARY AND ENVIRONMENTAL	66	14	52	1	3	1		45	2
MINING	2	1	1					1	
MATERIALS SCIENCE	127	37	83		17			61	5
ENGINEERING, GENERAL	33	10	22	1				20	1
ENGINEERING, OTHER	95	29	61	1	3		1	49	7
LIFE SCIENCES	**4767**	**666**	**3986**	**37**	**182**	**68**	**35**	**3506**	**158**
BIOLOGICAL SCIENCES	3172	298	2788	29	120	35	24	2468	112
BIOCHEMISTRY	608	54	535	4	33	6	5	467	20
BIOPHYSICS	142	18	115	2	9	1	1	94	8
BIOMETRICS, BIOSTATISTICS	52	10	42	1	3		1	36	1
ANATOMY	116	6	102		2		2	94	4
CYTOLOGY	37	1	34		1		1	31	1
EMBRYOLOGY	19		19	1				18	
IMMUNOLOGY	101	6	90	1	7			80	2
BOTANY	158	12	145	2	1	3	3	131	5
ECOLOGY	163	11	152	3	1	2		140	6
HYDROBIOLOGY	14		14					14	
MICROBIOLOGY AND BACTERIOLOGY	312	22	282	1	10	6	2	250	13
PHYSIOLOGY, ANIMAL	319	31	285	3	9		4	259	10
PHYSIOLOGY, PLANT	43	13	30			1		27	2
ZOOLOGY	254	13	236	3	3	3		217	10
GENETICS	140	11	125		5		3	113	4
ENTOMOLOGY	153	33	119	3	5	1	2	102	6
MOLECULAR BIOLOGY	131	13	118	3	9	1		100	5
NUTRITION AND/OR DIETETICS	82	22	60		10	4		43	3
BIOL SCIENCES, GENERAL	176	11	152		4	5		133	10
BIOL SCIENCES, OTHER	152	11	133	2	8	2		119	2
AGRICULTURAL SCIENCES	924	309	602	4	22	17	6	536	17
AGRONOMY	122	50	70		3	1	1	61	4
AGRICULTURAL ECONOMICS	142	53	87	1	1	2	2	79	2
ANIMAL HUSBANDRY	25	7	17					16	1
FOOD SCIENCE AND TECHNOLOGY	107	46	59		4	3		50	2
FISH AND WILDLIFE	66	5	61		3			57	1
FORESTRY	66	11	53	1	2	1		47	2
HORTICULTURE	60	20	39		3		1	33	2
SOILS AND SOIL SCIENCE	72	37	33			4	1	27	1
ANIMAL SCIENCE AND ANIMAL NUTRITION	101	27	74		1	2	1	68	2
PHYTOPATHOLOGY	82	25	57		2	2		53	
AGRICULTURE, GENERAL	6	6							
AGRICULTURE, OTHER	75	22	52	2	3	2		45	
MEDICAL SCIENCES	671	59	596	4	40	16	5	502	29
PUBLIC HEALTH AND EPIDEMIOLOGY	106	17	87	1	1	7	3	72	3
VETERINARY MEDICINE	24	6	18		2			15	1
HOSPITAL ADMINISTRATION	8		8					7	1
NURSING	32		32		1	2		29	
PARASITOLOGY	17	2	15		1			14	
ENVIRONMENTAL HEALTH	25	1	22		1	1		18	2
PATHOLOGY	99	8	83		5		1	71	6
PHARMACOLOGY	196	11	183	3	12	1		163	4
PHARMACY	49	6	43		14	2		24	3
MEDICAL SCIENCES, GENERAL	18	1	17		1	2	1	8	5
MEDICAL SCIENCES, OTHER	97	7	88		2	1		81	4

TABLE 1A. CONTINUED

SUBFIELD OF DOCTORATE	TOTAL DOCTORATES	NON-U.S. CITIZENS TEMP. VISAS	U.S. CITIZENS AND NON-U.S. WITH PERMANENT VISAS RACIAL/ETHNIC GROUP [1]						
			TOTAL	AMERICAN INDIAN	ASIAN	BLACK	HISPANIC	WHITE	OTHER & UNKNOWN
SOCIAL SCIENCES (INCL PSYCH)	**6504**	**565**	**5716**	**47**	**106**	**220**	**82**	**5011**	**250**
ANTHROPOLOGY	386	25	351	3	6	1	6	313	22
COMMUNICATIONS	287	11	273	2	4	7	6	241	13
SOCIOLOGY	725	66	645	8	15	33	13	547	29
ECONOMICS	809	200	591	1	20	19	3	521	27
ECONOMETRICS	29	11	18		2	1		12	3
STATISTICS	36	17	18		1			16	1
GEOGRAPHY	155	23	128		1	3	3	110	11
AREA STUDIES	18	1	16					14	2
POLITICAL SCIENCE	613	67	533	4	15	33	5	445	28
PUBLIC ADMINISTRATION	172	13	140	2		10	4	113	11
INTERNATIONAL RELATIONS	96	15	81	2	4	4	2	64	5
URBAN AND REGIONAL PLANNING	79	20	57	1	2	9		44	1
SOCIAL SCIENCES, GENERAL	27	4	22			6		16	
SOCIAL SCIENCES, OTHER	112	21	87	2		4	1	75	5
PSYCHOLOGY	2960	71	2756	22	33	90	39	2480	92
CLINICAL	914	7	905	6	6	40	19	819	15
COUNSELING AND GUIDANCE	263	6	255	4	3	7	4	228	9
DEVELOP AND GERONTOL	203	5	198	1	4	1	1	185	6
EDUCATIONAL	133	7	125	1	1	2	3	117	1
SCHOOL PSYCHOLOGY	147		142		2	3	2	133	2
EXPERIMENTAL	337	16	321	1	2	5	1	299	13
COMPARATIVE	22		22	1		1		20	
PHYSIOLOGICAL	132	6	126	1	2	1	2	115	5
INDUSTRIAL AND PERSONNEL	81	3	78	1	1	1	3	71	1
PERSONALITY	62	1	61			4		55	2
PSYCHOMETRICS	19	2	17	1	2			14	
SOCIAL	201	7	194	1	4	8		175	6
PSYCHOLOGY, GENERAL	261	7	189	3	4	6	2	145	29
PSYCHOLOGY, OTHER	185	4	123	1	2	11	2	104	3
HUMANITIES	**4559**	**216**	**4209**	**10**	**49**	**108**	**121**	**3687**	**214**
ART, HISTORY AND CRITICISM	152	7	137	1	1	2		126	7
HISTORY, AMERICAN	342	5	334	2		14	5	299	14
HISTORY, EUROPEAN	261	4	256	1	1	2	2	240	10
HISTORY, OTHER	329	30	273	1	9	7	15	203	38
HISTORY AND PHILOSOPHY OF SCIENCE	29	1	28					27	1
AMERICAN STUDIES	91		89			8	1	80	
THEATRE AND THEATRE CRITICISM	85	10	75	1	1		1	70	2
MUSIC	404	16	365	6	2	14	3	324	16
SPEECH AS A DRAMATIC ART	61		59			2	1	56	
ARCHEOLOGY	23	1	22	1				20	1
RELIGION	175	13	157	1	2			145	9
PHILOSOPHY	329	8	317	4	5	6	1	284	17
LINGUISTICS	190	39	145		8	6	7	118	6
COMPARATIVE LITERATURE	151	8	135	1	4	1	14	109	6
HUMANITIES, GENERAL	21		21					21	
HUMANITIES, OTHER	49	1	47			1	2	41	3
LANGUAGES AND LITERATURE	1867	73	1749	11	16	45	69	1524	84
AMERICAN	222	5	217	2	1	8	2	196	8
ENGLISH	857	23	812	4	9	21	7	730	41
GERMAN	140	3	134	1		4		123	6
RUSSIAN	56	5	51		1			48	2
FRENCH	211	7	202	1		8	3	185	5
SPANISH AND PORTUGUESE	199	9	186	1		3	56	115	11
ITALIAN	22	6	14	1				13	
CLASSICAL	60	3	57			1		54	2
OTHER LANGUAGES	100	12	76	1	5		1	60	9
PROFESSIONAL FIELDS	**1340**	**166**	**1147**	**5**	**33**	**44**	**15**	**997**	**53**
THEOLOGY	155	9	141		4		1	129	7
BUSINESS ADMINISTRATION	667	104	550	2	16	7	4	488	33
HOME ECONOMICS	76	6	70	1	1	3		65	
JOURNALISM	18	3	15					15	
SPEECH AND HEARING SCIENCES	146	3	139	2	2	8	1	120	6
LAW, JURISPRUDENCE	27	15	10		1	2	1	6	
SOCIAL WORK	164	12	151		4	18	7	117	5
LIBRARY AND ARCHIVAL SCIENCE	67	11	55		3	5	1	44	2
PROFESSIONAL FIELDS, OTHER	20	3	16		2	1		13	

1/ For more detailed explanations of racial/ethnic groups see item H on questionnaire on page 30.

TABLE 1A. CONTINUED

SUBFIELD OF DOCTORATE	TOTAL DOCTORATES	NON-U.S. CITIZENS TEMP. VISAS	U.S. CITIZENS AND NON-U.S. WITH PERMANENT VISAS RACIAL/ETHNIC GROUP [1]						
			TOTAL	AMERICAN INDIAN	ASIAN	BLACK	HISPANIC	WHITE	OTHER & UNKNOWN
EDUCATION	**7448**	**379**	**6884**	**68**	**66**	**687**	**140**	**5718**	**205**
FOUNDATIONS: SOCIAL, PHILOS	230	29	195	1	2	16	6	163	7
EDUCATIONAL PSYCHOLOGY	448	24	464	3	4	33	12	397	15
ELEMENTARY EDUCATION, GENERAL	187	7	179	4	2	16	4	149	4
SECONDARY EDUCATION, GENERAL	142	8	134	3		10		117	4
HIGHER EDUCATION	713	25	681	12	8	84	7	549	21
ADULT EDUC AND EXTENSION EDUC	173	16	157	1	1	21	3	128	3
EDUCATIONAL MEAS AND STATISTICS	118	7	109	2	2	2	1	99	3
CURRICULUM AND INSTRUCTION	755	44	704	6	4	73	24	577	20
EDUCATIONAL ADMIN AND SUPERVISION	1510	64	1437	10	5	175	34	1179	34
GUIDANCE,COUNS,STUDENT PERSONNEL	660	18	637	5	8	56	11	543	14
SPECIAL ED (GIFTED,HANDICAPPED,ETC)	324	2	320	4	2	24	6	277	7
AUDIO-VISUAL MEDIA	79	12	66		1	1		61	3
TEACHING FIELDS	2059	123	1801	17	27	176	32	1479	70
AGRICULTURE	25	2	23			3		20	
ART	55	2	51		1	3	1	45	1
BUSINESS	65	6	58			4		53	1
ENGLISH	69	2	64			6		54	4
FOREIGN LANGUAGE	36	8	28		1		5	21	1
HOME ECONOMICS	31	1	30		1	3	1	25	
INDUSTRIAL ARTS	39	3	36	1		2		32	1
MATHEMATICS	98	5	91	1	2	10		77	1
MUSIC	89	1	87	1	1	6		76	3
PHYS ED, HEALTH, AND REC	333	38	292	3	6	16	5	257	5
READING	134	2	131	2	2	10	2	109	6
SCIENCE	128	9	117		3	17	2	91	4
SOCIAL SCIENCE	49	2	47			7		38	2
SPEECH	14	1	12					12	
VOCATIONAL	211	4	207	2	3	12	6	181	3
OTHER TEACHING FIELDS	63	1	60		2	9	4	42	3
EDUCATION, GENERAL	404	24	266	6	3	43	4	185	25
EDUCATION, OTHER	216	12	201	1	2	25	2	161	10
OTHER AND UNSPECIFIED	**44**	**5**	**36**					**29**	**7**

SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

TABLE 2
STATISTICAL PROFILE OF DOCTORATE RECIPIENTS BY FIELD OF DOCTORATE, FY 1977 1/

TOTAL ALL DOCTORATES

	FY 1977 TOTAL	PHYSICS AND ASTRONOMY	CHEMISTRY	EARTH, ENVIRONM., AND MARINE SCIENCES	PHYSICAL SCIENCES	MATHEMATICS	ENGINEERING	EMP FIELDS	BASIC MEDICAL SCIENCES	OTHER BIOSCIENCES	BIOSCIENCES	MEDICAL SCIENCES	AGRICULTURAL SCIENCES	LIFE SCIENCES
NUMBER IN FIELD	31672	1149	1570	691	3410	959	2641	7010	1785	1387	3172	671	924	4767
MALE %	75.2	94.4	88.5	91.5	91.1	86.7	97.2	92.8	77.6	76.2	77.0	75.4	93.2	79.9
FEMALE %	24.8	5.6	11.5	8.5	8.9	13.3	2.8	7.2	22.4	23.8	23.0	24.6	6.8	20.1
U.S. CITIZENSHIP %	82.1	72.2	78.8	80.5	76.9	74.0	55.6	68.5	83.6	83.6	83.6	78.8	61.6	78.7
FOREIGN CITIZENSHIP %	15.2	25.6	19.4	17.7	21.1	23.4	41.6	29.1	13.4	14.1	13.7	18.8	37.0	18.9
UNKNOWN %	2.7	2.2	1.8	1.9	2.0	2.6	2.8	2.4	3.0	2.3	2.7	2.4	1.4	2.4
MARRIED %	66.1	61.2	61.4	70.6	63.2	58.6	67.7	64.3	62.9	65.4	64.0	66.3	76.9	66.8
NOT MARRIED %	29.5	34.3	35.4	24.9	32.9	36.9	28.5	31.8	32.8	30.6	31.8	29.8	20.6	29.4
UNKNOWN %	4.4	4.5	3.2	4.5	3.9	4.5	3.8	4.0	4.3	4.0	4.2	3.9	2.5	3.8
MEDIAN AGE AT DOCTORATE	31.6	29.5	28.6	30.5	29.2	29.1	30.0	29.5	29.0	30.3	29.5	30.4	31.2	30.0
PERCENT WITH BACC IN SAME FIELD AS DOCTORATE	55.5	79.7	87.5	46.3	76.5	76.2	80.0	77.8	17.5	68.3	39.7	22.5	59.3	41.1
PERCENT WITH MASTERS	81.3	66.7	39.9	79.5	56.9	76.7	91.1	72.5	43.0	69.8	54.7	58.1	92.3	62.5
MEDIAN TIME LAPSE FROM BACC TO DOCT														
TOTAL TIME YRS	8.7	7.3	6.3	8.0	6.9	6.9	7.5	7.1	6.5	7.6	7.0	7.3	8.2	7.2
REGISTERED TIME YRS	6.1	6.2	5.2	5.9	5.7	5.8	5.6	5.7	5.5	6.0	5.8	5.6	5.4	5.7
POSTDOCTORAL STUDY PLANS %	17.0	46.6	46.9	25.9	42.6	11.1	14.8	27.8	74.0	38.8	58.6	39.0	13.3	47.1
FELLOWSHIP	8.3	14.0	20.3	9.8	16.0	4.5	4.4	10.1	46.0	23.1	36.0	23.4	4.5	28.1
RESEARCH ASSOC	6.6	31.4	25.0	15.9	25.3	4.6	9.1	16.4	20.1	12.3	16.7	10.3	7.8	14.1
TRAINEESHIP	.8	.4	.4	.0	.4	1.0	.8	.6	2.7	1.2	2.0	1.5	.5	1.7
OTHER	1.4	.8	1.1	.1	.8	.9	.6	.8	5.2	2.2	3.9	3.9	.4	3.2
PLANNED EMPLOYMENT AFTER DOCTORATE %	75.4	43.0	47.5	68.0	50.1	81.3	78.8	65.2	20.5	54.5	35.4	52.9	81.2	46.7
EDUC INSTITUTION	49.4	16.5	12.4	27.9	16.9	59.1	22.8	24.9	12.3	36.6	22.9	26.2	45.5	27.7
INDUSTRY/BUSINESS	9.5	13.4	27.8	18.2	21.0	13.0	38.4	26.4	4.2	4.8	4.4	10.3	12.4	6.8
GOVERNMENT	9.2	9.7	4.3	18.4	8.9	6.0	13.6	10.3	2.2	7.7	4.6	9.8	18.2	8.0
NONPROFIT	4.0	1.1	1.1	1.3	1.2	1.1	1.9	1.4	.8	2.5	1.5	4.8	1.5	2.0
OTHER & UNKNOWN	3.4	2.3	2.0	2.2	2.1	2.0	2.2	2.1	1.1	3.0	1.9	1.8	3.6	2.2
POSTDOCT STATUS UNKN %	7.5	10.4	5.6	6.1	7.3	7.6	6.3	7.0	5.5	6.7	6.0	8.0	5.5	6.2
DEFINITE POSTDOCTORAL STUDY	12.2	33.9	36.1	18.8	31.8	6.7	9.1	19.8	61.8	27.7	46.9	31.0	8.3	37.2
SEEKING POSTDOCTORAL STUDY	4.8	12.7	10.8	7.1	10.7	4.4	5.7	8.0	12.2	11.1	11.7	8.0	5.0	9.9
DEFINITE EMPLOYMENT	54.1	29.2	36.3	51.8	37.1	56.4	59.3	48.1	14.2	35.8	23.6	38.9	58.3	32.5
SEEKING EMPLOYMENT	21.3	13.8	11.2	16.2	13.1	24.9	19.5	17.1	6.3	18.7	11.8	14.0	22.8	14.2
EMPLOYMENT ACTIVITY AFTER DOCTORATE %														
PRIMARY ACTIVITY														
R & D	21.7	56.8	66.8	48.0	58.9	35.1	61.4	56.2	41.9	33.7	36.4	37.9	49.5	41.3
TEACHING	46.0	30.4	20.4	27.7	25.1	52.3	20.7	27.4	36.8	46.0	42.9	34.9	25.6	35.5
ADMINISTRATION	13.1	2.1	1.8	3.6	2.4	1.8	2.7	2.5	4.0	3.6	3.7	8.4	2.4	4.1
PROF. SERVICES	9.8	2.7	2.1	7.3	3.7	3.3	5.2	4.4	7.5	6.7	6.9	8.8	7.1	7.3
OTHER	2.2	2.1	1.2	4.7	2.5	2.0	2.6	2.4	1.2	2.6	2.1	2.3	3.0	2.5
ACTIVITY UNKNOWN	7.3	6.0	7.7	8.7	7.5	5.4	7.4	7.1	8.7	7.5	7.9	7.7	12.4	9.4
SECONDARY ACTIVITY														
R & D	25.7	19.0	12.6	26.5	18.3	38.6	18.4	21.6	29.2	30.6	30.2	27.6	21.3	26.7
TEACHING	9.8	5.1	3.5	6.7	4.8	17.6	8.0	8.3	15.0	11.3	12.6	15.3	18.6	15.1
ADMINISTRATION	8.6	6.5	10.5	10.6	9.5	3.9	7.9	7.9	12.3	8.1	9.5	10.3	6.5	8.6
PROF. SERVICES	6.2	2.1	2.8	5.6	3.4	3.1	5.6	4.4	4.0	3.8	3.9	8.0	4.6	4.8
OTHER	1.7	.6	.2	1.4	.6	.2	1.3	.9	1.2	.2	.5	1.1	.6	.6
NO SECONDARY ACTIVITY	40.6	60.7	62.6	40.5	55.9	31.2	51.3	49.8	29.6	38.5	35.5	29.9	36.0	34.7
UNKNOWN	7.3	6.0	7.7	8.7	7.5	5.4	7.4	7.1	8.7	7.5	7.9	7.7	12.4	9.4
REGION OF EMPLOYMENT AFTER DOCTORATE %														
NEW ENGLAND	6.5	6.5	6.3	5.6	6.2	7.6	5.7	6.2	4.7	6.9	6.1	6.1	1.7	4.6
MIDDLE ATLANTIC	14.6	14.6	24.0	9.2	17.3	16.3	16.9	17.0	15.0	9.5	11.3	12.6	5.4	9.5
EAST NO CENTRAL	14.8	8.6	20.2	8.9	13.9	16.3	12.9	13.8	13.8	9.3	10.8	12.6	9.6	10.7
WEST NO CENTRAL	6.7	3.0	5.1	3.6	4.1	4.6	4.0	4.1	6.7	6.0	6.3	7.3	8.7	7.3
SOUTH ATLANTIC	16.5	18.5	12.5	15.9	15.0	17.0	12.3	14.1	18.6	17.9	18.2	22.2	14.1	17.4
EAST SO CENTRAL	4.9	2.4	3.9	3.9	3.5	3.7	4.9	4.2	4.7	6.3	5.7	2.7	4.1	4.6
WEST SO CENTRAL	8.1	5.1	7.2	13.1	8.3	7.8	8.4	8.2	4.7	7.5	6.5	10.3	8.2	7.7
MOUNTAIN	5.5	8.6	3.5	13.4	7.7	5.0	6.5	6.7	2.0	4.8	.9	4.6	5.8	4.6
PACIFIC & INSULAR	10.2	19.3	8.9	12.6	12.7	10.7	13.9	13.0	12.6	13.5	13.2	6.1	9.1	10.6
FOREIGN	8.9	9.8	6.5	12.3	9.0	9.4	11.2	10.1	11.5	15.1	13.9	12.3	30.8	19.5
REGION UNKNOWN	3.3	3.6	1.9	1.4	2.2	1.7	3.4	2.7	5.5	3.2	4.0	3.1	2.6	3.4

1/ Refer to explanatory note on page 12 and the description of doctoral field groupings inside back cover.

TABLE 2. CONTINUED

TOTAL ALL DOCTORATES

PSYCHOLOGY	ECONOMICS	ANTHROPOLOGY & SOCIOLOGY	POLIT. SCI. PUBLIC ADMIN. INTERN'L REL.	OTHER SOCIAL SCIENCES	SOCIAL SCIENCES INCL. PSYCHOL.	TOTAL SCIENCES	HISTORY	ENG. AND AMER. LANG. AND LIT.	FOREIGN LANG. AND LIT.	OTHER HUMANITIES	HUMANITIES	PROFESSIONAL FIELDS	EDUCATION	TOTAL NON-SCIENCES	OTHER OR UNSPECIFIED 2/
2960	838	1111	881	714	6504	18281	961	1079	788	1731	4559	1340	7448	13347	44
63.5	91.3	66.4	33.9	77.5	71.9	84.0	77.5	54.7	48.9	68.3	63.7	77.4	65.3	66.0	77.3
36.5	8.7	33.6	16.1	22.5	28.1	16.0	22.5	45.3	51.1	31.7	36.3	22.6	34.7	34.0	22.7
91.5	67.3	85.9	81.0	80.5	84.8	76.9	90.9	93.0	83.5	87.5	88.8	80.7	91.0	89.2	
4.0	30.5	12.0	15.3	17.2	11.8	20.3	5.9	5.0	13.6	9.1	8.2	17.2	6.5	8.2	
4.5	2.1	2.2	3.6	2.2	3.4	2.8	3.1	2.0	2.9	3.4	2.9	2.0	2.5	2.6	
58.4	68.1	63.3	66.1	67.9	62.6	64.3	65.1	61.4	60.3	58.3	60.8	71.6	72.8	68.6	
35.3	28.5	32.9	27.2	27.2	32.0	31.2	29.0	34.4	34.9	36.0	34.0	24.7	23.3	27.1	
6.3	3.3	3.8	6.7	4.9	5.4	4.4	5.8	4.2	4.8	5.7	5.2	3.7	4.0	4.4	
29.9	30.6	32.5	32.6	32.5	30.9	30.1	32.2	32.3	33.0	32.9	32.6	33.9	36.5	34.6	
65.6	63.6	56.3	54.9	28.3	58.2	61.3	65.2	80.2	65.2	51.5	63.5	37.8	39.7	47.7	
75.5	78.0	87.2	87.1	94.4	81.5	73.1	90.0	87.3	85.3	84.7	86.5	93.1	96.2	92.6	
7.1	7.9	9.1	9.6	9.5	8.0	7.4	9.7	9.7	10.0	10.1	9.9	10.7	12.5	11.3	
5.5	5.7	6.7	6.3	6.1	5.9	5.7	7.3	7.0	7.2	7.0	7.1	6.2	6.4	6.7	
15.6	3.9	9.6	5.3	3.6	10.4	26.6	7.3	3.4	5.8	5.0	5.2	2.6	3.3	3.9	
8.6	1.6	5.9	2.6	1.3	5.6	13.2	4.3	1.6	2.7	2.1	2.5	.9	1.1	1.6	
2.8	2.0	2.7	1.7	1.0	2.3	10.8	.8	.2	1.5	1.0	.9	1.1	.9	.9	
2.4	.1	.1	.1	.3	1.2	1.1	.1	.1	.1	.2	.2	.4	.5	.3	
1.9	.2	1.0	.9	1.1	1.3	1.6	2.1	1.6	1.5	1.7	1.7	.2	.9	1.1	
75.6	90.5	83.2	84.1	86.8	81.2	66.1	79.7	85.7	82.6	84.8	83.6	91.6	90.5	88.3	
35.8	57.5	69.6	57.2	66.9	50.7	34.8	60.4	74.1	71.1	69.6	69.6	68.2	70.0	69.5	
5.6	9.2	2.9	5.7	4.8	5.5	13.9	2.8	4.2	2.5	3.4	3.3	6.9	2.8	3.4	
16.1	16.7	4.6	13.1	7.7	12.9	10.6	6.5	1.5	1.6	2.3	2.9	5.3	10.1	7.1	
12.6	2.6	2.9	4.3	3.8	7.5	3.8	3.4	1.1	1.9	5.3	3.3	9.1	4.2	4.4	
5.4	4.4	3.2	3.9	3.6	4.5	3.0	6.7	4.8	5.5	4.2	5.1	2.1	3.4	3.9	
8.8	5.6	7.2	10.6	9.5	8.4	7.3	13.0	10.8	11.5	10.2	11.2	5.7	6.1	7.8	
10.6	2.3	6.2	3.1	2.1	6.8	19.7	3.5	1.7	1.9	2.6	2.5	1.6	1.7	1.9	
5.0	1.7	3.4	2.3	1.5	3.6	6.9	3.7	1.8	3.9	2.4	2.8	1.0	1.7	2.0	
52.4	74.2	60.6	62.4	63.3	59.2	48.0	46.0	51.4	49.0	55.9	51.6	78.4	66.4	62.6	
23.2	16.2	22.6	21.7	23.5	22.0	18.1	33.7	34.3	33.6	28.9	32.0	13.3	24.1	25.7	
15.0	33.6	19.9	12.0	13.9	18.3	36.9	6.3	2.2	1.6	5.4	4.2	7.2	6.0	5.6	
31.9	52.1	67.3	56.4	67.7	49.0	38.3	67.6	81.8	85.0	76.8	77.6	67.1	40.2	54.1	
4.6	3.1	3.3	14.2	6.0	5.7	4.2	9.3	5.0	3.1	3.9	5.1	7.2	33.9	22.4	
42.8	1.6	2.5	3.3	4.0	18.9	11.3	4.3	2.7	1.3	3.5	3.1	9.2	10.4	8.2	
1.2	3.4	.9	4.9	1.3	2.0	2.3	4.3	2.3	3.4	3.3	3.3	2.9	1.4	2.1	
4.6	6.3	6.1	9.3	7.1	6.1	7.1	8.1	5.9	5.7	7.1	6.8	6.3	8.2	7.6	
29.8	35.0	45.2	35.1	43.4	35.7	28.7	29.2	27.2	36.5	30.3	30.4	38.7	15.5	22.6	
13.5	11.1	8.9	5.6	9.5	10.7	10.6	6.1	3.6	2.6	5.4	4.6	8.4	11.3	9.0	
10.9	8.2	7.1	6.9	5.5	8.6	8.3	6.3	7.2	7.0	8.1	7.4	7.6	9.9	8.9	
9.4	2.9	1.2	3.1	4.0	5.4	4.9	2.3	2.2	1.8	4.9	3.2	8.8	9.5	7.6	
1.9	1.0	.6	2.2	2.7	1.6	1.2	1.6	2.7	.5	6.2	3.6	1.1	1.9	2.3	
30.0	35.5	30.9	37.8	27.9	31.9	39.3	46.4	51.2	45.9	38.1	44.0	29.1	43.8	42.0	
4.6	6.3	6.1	9.3	7.1	6.1	7.1	8.1	5.9	5.7	7.1	6.8	6.3	8.2	7.6	
8.5	9.5	8.3	6.7	3.3	7.8	6.6	8.1	11.5	15.8	8.0	10.1	4.6	5.1	6.5	
18.3	13.7	14.6	15.5	15.0	16.1	15.3	18.1	15.9	17.1	14.7	16.0	11.6	13.2	13.8	
16.3	12.2	12.3	9.1	19.0	14.2	13.5	16.1	14.6	14.5	17.8	16.2	16.4	16.1	16.1	
6.4	4.5	6.4	4.9	4.6	5.7	5.4	5.9	5.9	5.7	7.7	6.6	6.4	9.1	8.1	
15.9	24.9	14.1	27.5	13.9	18.5	16.6	16.7	16.8	12.2	11.5	13.8	15.2	17.8	16.4	
5.0	2.7	5.1	4.2	3.8	4.4	4.4	5.4	5.8	3.1	4.1	4.6	7.2	5.7	5.6	
7.6	3.5	8.5	6.0	6.6	6.8	7.5	6.6	9.9	7.0	9.1	8.5	10.0	8.5	8.7	
4.8	3.9	6.8	2.2	7.1	4.9	5.5	5.0	3.8	2.8	4.1	4.0	5.6	6.3	5.6	
9.8	6.6	10.7	10.9	11.9	9.8	11.2	7.5	7.6	10.4	11.1	9.4	8.9	9.1	9.2	
3.5	16.2	10.4	9.6	11.7	8.6	11.1	6.3	4.7	7.5	8.9	7.2	12.0	5.3	6.7	
3.8	2.3	2.8	3.5	2.9	3.2	3.0	4.3	3.6	3.9	3.1	3.6	2.1	3.8	3.5	

2/ Statistics are not presented for this group because too few records contained the specified data.

SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

TABLE 2
STATISTICAL PROFILE OF DOCTORATE RECIPIENTS BY FIELD OF DOCTORATE, FY 1977[1/]

DOCTORATES: MEN

	FY 1977 TOTAL	PHYSICS AND ASTRONOMY	CHEMISTRY	EARTH, ENVIRONM., AND MARINE SCIENCES	PHYSICAL SCIENCES	MATHEMATICS	ENGINEERING	ENG FIELDS	BASIC MEDICAL SCIENCES	OTHER BIOSCIENCES	BIOSCIENCES	MEDICAL SCIENCES	AGRICULTURAL SCIENCES	LIFE SCIENCES
TOTAL MALE	23827	1085	1390	632	3107	831	2567	6505	1386	1057	2443	506	861	3810
MALE AS A PERCENT OF TOTAL DOCTORATES	75.2	94.4	88.5	91.5	91.1	86.7	97.2	92.8	77.6	76.2	77.0	75.4	93.2	79.9
U.S. CITIZENSHIP %	80.0	72.7	79.7	80.5	77.4	74.4	55.6	68.4	83.5	83.6	83.6	78.3	61.6	77.9
FOREIGN CITIZENSHIP %	17.2	25.1	18.3	17.4	20.5	22.9	41.6	29.1	13.3	14.1	13.7	19.0	36.9	19.6
UNKNOWN %	2.7	2.2	1.9	2.1	2.1	2.8	2.9	2.5	3.1	2.3	2.7	2.8	1.5	2.5
MARRIED %	70.3	60.7	62.6	72.3	63.9	58.8	67.7	64.8	66.7	71.1	68.2	72.1	79.4	71.2
NOT MARRIED %	25.2	34.7	34.2	22.9	32.1	36.6	28.4	31.2	29.1	25.7	27.7	23.5	17.9	24.9
UNKNOWN %	4.5	4.6	3.2	4.7	4.0	4.6	3.9	4.0	4.2	4.2	4.2	4.3	2.7	3.9
MEDIAN AGE AT DOCTORATE	31.3	29.5	28.6	30.7	29.3	29.1	30.0	29.6	28.9	30.5	29.5	30.1	31.4	30.0
PERCENT WITH BACC IN SAME FIELD AS DOCTORATE	56.5	79.8	88.3	45.6	76.6	74.7	81.0	78.1	17.4	68.6	39.5	19.4	61.2	41.8
PERCENT WITH MASTERS	80.1	66.5	39.1	79.1	56.8	75.6	91.1	72.7	42.3	70.0	54.3	54.9	92.5	63.0
MEDIAN TIME LAPSE FROM BACC TO DOCT														
TOTAL TIME YRS	8.4	7.3	6.3	8.1	7.0	6.9	7.5	7.2	6.5	7.6	7.0	7.0	8.2	7.2
REGISTERED TIME YRS	6.0	6.2	5.2	6.0	5.7	5.8	5.6	5.7	5.6	6.0	5.8	5.6	5.5	5.7
POSTDOCTORAL STUDY PLANS %	17.9	46.4	46.4	24.8	4[illegible]	11.4	14.8	27.4	73.6	36.9	57.[illegible]	39.7	12.8	45.2
FELLOWSHIP	8.5	14.4	20.4	9.2	16.0	4.8	4.3	10.0	44.7	20.7	34.3	24.7	4.3	26.2
RESEARCH ASSOC	7.4	31.0	24.4	15.5	24.9	4.8	9.1	16.1	20.2	12.2	16.7	9.5	7.5	13.7
TRAINEESHIP	.8	.5	.5	.0	.4	.8	.8	.6	2.8	1.4	2.2	1.2	.6	1.7
OTHER	1.3	.6	1.1	.2	.7	1.0	.6	.7	5.9	2.6	4.5	4.3	.3	3.5
PLANNED EMPLOYMENT AFTER DOCTORATE %	74.9	43.4	48.2	69.1	50.8	81.0	79.0	65.8	21.1	56.2	36.3	52.8	81.6	48.7
EDUC INSTITUTION	46.8	16.8	31.6	28.2	16.8	58.1	22.8	24.4	12.3	37.4	23.2	24.1	45.8	28.4
INDUSTRY/BUSINESS	11.3	13.6	29.1	18.7	21.6	13.6	38.6	27.3	4.7	5.2	4.9	11.9	12.4	7.5
GOVERNMENT	10.0	10.0	4.4	19.0	9.3	6.5	13.7	10.7	2.3	8.3	4.9	9.7	18.6	8.6
NONPROFIT	3.9	1.1	1.1	1.1	1.1	1.1	1.8	1.4	.9	2.6	1.7	5.3	1.3	2.1
OTHER & UNKNOWN	2.9	1.9	2.0	2.2	2.0	1.7	2.1	2.0	.8	2.6	1.6	1.8	3.6	2.1
POSTDOCT STATUS UNKN %	7.2	10.2	5.4	6.0	7.2	7.6	6.2	6.9	5.3	6.9	6.0	7.5	5.6	6.1
DEFINITE POSTDOCTORAL STUDY	13.1	34.3	35.8	17.7	31.6	7.3	9.1	19.6	62.0	26.2	46.5	31.2	8.1	35.8
SEEKING POSTDOCTORAL STUDY	4.9	12.1	10.6	7.1	10.4	4.1	5.7	7.7	11.5	10.7	11.2	8.5	4.6	9.3
DEFINITE EMPLOYMENT	55.1	30.1	37.3	53.6	38.1	57.3	59.5	49.0	14.8	37.4	24.6	40.3	59.6	34.6
SEEKING EMPLOYMENT	19.8	13.3	10.9	15.5	12.6	23.7	19.4	16.7	6.3	18.8	11.7	12.5	22.1	14.1
EMPLOYMENT ACTIVITY AFTER DOCTORATE %														
PRIMARY ACTIVITY														
R & D	24.9	57.5	68.2	49.0	59.7	36.8	6[illegible].3	57.0	44.4	35.4	38.[illegible]	41.2	49.3	43.1
TEACHING	42.7	30.0	19.1	26.8	24.3	50.4	2[illegible].5	26.4	34.1	43.3	40.2	31.9	25.7	33.3
ADMINISTRATION	13.2	2.1	1.7	3.8	2.4	1.7	[illegible].7	2.5	3.9	3.3	[illegible].5	8.3	2.3	3.8
PROF. SERVICES	9.0	2.4	2.3	6.5	3.5	3.4	[illegible].4	4.4	8.3	7.1	7.5	8.3	7.2	7.5
OTHER	2.[illegible]	1.8	1.0	5.0	2.[illegible]	2.3	[illegible].6	2.5	.5	2.8	2.0	2.5	2.7	2.4
ACTIVITY UNKNOWN	8.0	6.1	7.7	8.[illegible]	[illegible].8	5.5	[illegible].5	7.2	8.8	8.1	8.3	7.8	12.7	9.9
SECONDARY ACTIVITY														
R & D	24.9	19.0	11.8	25.7	17.7	37.4	1[illegible].3	20.9	29.8	29.4	29.5	27.9	21.4	26.1
TEACHING	9.8	5.2	3.7	7.1	5.1	18.1	[illegible].0	8.4	14.6	11.9	12.8	14.2	17.9	15.0
ADMINISTRATION	8.7	6.7	11.2	10.6	9.8	4.4	8.[illegible]	8.1	13.2	8.4	10.0	10.8	6.8	8.9
PROF. SERVICES	6.0	2.1	2.9	5.6	3.5	2.9	5.7	4.5	3.9	4.1	4.0	9.8	4.7	5.2
OTHER	1.6	.6	.2	1.5	.7	.0	1.4	.9	1.5	.0	.5	1.5	.6	.7
NO SECONDARY ACTIVITY	41.1	60.2	62.6	40.7	55.7	31.7	51.1	49.9	28.3	38.2	34.8	27.9	35.9	34.2
UNKNOWN	8.0	6.1	7.7	8.8	7.6	5.5	7.5	7.2	8.8	8.1	8.3	7.8	12.[illegible]	9.9
REGION OF EMPLOYMENT AFTER DOCTORATE %														
NEW ENGLAND	6.0	6.4	6.2	5.3	6.0	6.9	5.8	6.1	4.9	6.1	5.7	6.4	1.8	[illegible]
MIDDLE ATLANTIC	14.3	14.7	23.7	9.4	17.1	16.4	16.7	16.8	15.6	9.9	11.8	12.3	5.7	9.[illegible]
EAST NO CENTRAL	14.4	8.3	19.8	8.6	13.4	15.1	13.1	13.5	14.1	8.4	10.3	12.7	9.6	10.[illegible]
WEST NO CENTRAL	6.7	3.1	5.4	3.8	4.3	4.8	4.1	4.3	6.8	5.6	[illegible].0	8.3	8.4	7.3
SOUTH ATLANTIC	16.3	18.3	12.5	16.2	15.2	17.6	12.1	14.1	19.0	16.5	17.3	22.5	13.6	16.7
EAST SO CENTRAL	4.9	2.4	3.9	4.1	3.5	4.0	4.8	4.2	4.4	6.6	[illegible].8	2.0	3.5	4.3
WEST SO CENTRAL	8.1	5.2	7.7	13.6	8.7	7.6	8.3	8.3	5.4	7.3	6.7	10.3	8.6	8.0
MOUNTAIN	5.7	8.9	3.9	13.0	7.8	5.5	6.5	6.9	1.5	5.3	4.0	5.4	5.7	4.9
PACIFIC & INSULAR	10.4	19.0	9.1	12.4	12.7	11.1	13.9	13.0	11.7	15.2	14.0	5.4	9.4	10.9
FOREIGN	10.1	10.1	5.8	12.1	8.8	9.5	11.3	10.1	11.7	16.5	14.8	11.3	31.2	20.7
REGION UNKNOWN	3.2	3.7	2.1	1.5	2.4	1.5	3.5	2.8	4.9	2.8	3.5	3.4	2.7	3.2

1/ Refer to explanatory note on page 12 and the description of doctoral fields inside back cover.

TABLE 2. CONTINUED

DOCTORATES: MEN

PSYCHOLOGY	ECONOMICS	ANTHROPOLOGY & SOCIOLOGY	POLIT. SCI., PUBLIC ADMIN., INTERN'L REL.	OTHER SOCIAL SCIENCES	SOCIAL SCIENCES INCL. PSYCHOL.	TOTAL SCIENCES	HISTORY	ENG. AND AMER. LANG. AND LIT.	FOREIGN LANG. AND LIT.	OTHER HUMANITIES	HUMANITIES	PROFESSIONAL FIELDS	EDUCATION	TOTAL NON-SCIENCES	OTHER OR UNSPECIFIED 2/
1879	765	738	739	553	4674	14989	745	590	385	1183	2903	1037	4864	8804	34
63.5	91.3	66.4	83.9	77.5	71.9	82.0	77.5	54.7	48.9	68.3	63.7	77.4	65.3	66.0	77.3
91.5	66.9	84.0	79.2	78.5	82.8	75.3	91.0	92.9	81.3	87.2	88.5	79.0	89.8	88.1	
3.9	30.7	13.8	17.1	19.3	13.8	21.9	6.3	5.6	15.8	9.3	8.6	18.9	7.6	9.3	
4.6	2.4	2.2	3.8	2.2	3.4	2.8	2.7	1.5	2.9	3.6	2.8	2.1	2.5	2.6	
63.0	70.1	69.5	67.9	73.8	67.2	67.2	68.1	66.1	65.7	63.7	65.6	77.4	81.1	75.6	
30.3	26.3	26.6	25.2	22.1	27.3	28.4	26.3	29.7	29.4	30.2	29.0	18.5	14.7	19.9	
6.7	3.7	3.9	6.9	4.2	5.5	4.4	5.6	4.2	4.9	6.1	5.4	4.1	4.1	4.6	
29.8	30.7	32.3	32.7	32.7	31.0	30.1	32.1	31.6	33.3	32.8	32.4	33.8	36.1	34.4	
67.5	63.1	56.0	55.3	30.4	58.6	62.8	66.2	80.2	59.0	54.4	63.2	38.4	37.4	46.0	
76.2	75.4	86.7	88.0	95.1	82.3	73.3	88.9	84.2	81.6	83.3	84.7	92.6	95.9	91.8	
7.1	7.9	9.0	9.6	9.5	8.1	7.4	9.5	9.2	10.1	10.0	9.7	10.4	12.3	11.0	
5.5	9.7	6.7	6.2	6.1	5.9	5.7	7.2	6.6	7.0	6.8	6.9	6.3	6.5	6.6	
16.0	3.8	9.1	5.0	3.8	9.7	26.4	7.0	3.6	5.2	4.4	5.0	2.1	3.0	3.6	
8.9	1.6	5.1	2.6	1.3	5.2	12.6	4.2	1.7	1.6	1.8	2.3	.7	1.0	1.4	
2.9	1.8	3.0	1.6	.9	2.3	11.2	.9	.2	2.1	.8	.4	1.0	.8	.9	
2.6	.1	.1	.1	.4	1.2	1.1	.1	.2	.3	.2	.2	.3	.5	.3	
1.6	.3	.8	.7	1.3	1.1	1.5	1.7	1.5	1.3	1.6	1.6	.2	.8	1.0	
75.6	90.8	83.7	84.7	87.2	82.2	66.6	81.2	87.1	83.6	85.5	84.5	92.4	91.2	89.1	
33.8	57.9	69.1	58.6	65.3	51.0	33.7	60.0	75.3	70.9	69.7	68.5	68.0	69.9	69.2	
6.3	9.5	3.3	5.4	5.1	6.1	15.6	3.1	4.9	3.1	4.0	3.8	7.7	3.0	3.8	
18.3	16.9	5.6	13.1	8.9	14.1	11.2	7.9	1.7	2.3	2.6	3.8	5.2	11.2	8.0	
12.4	2.6	3.0	3.8	3.8	6.9	3.3	3.8	1.5	2.3	6.0	4.0	9.5	4.4	4.9	
4.8	3.9	2.8	3.8	4.2	4.1	2.7	6.4	3.7	4.9	3.3	4.4	1.9	2.7	3.2	
8.4	5.4	7.2	10.3	9.0	8.1	7.1	11.8	9.3	11.2	10.1	10.5	5.5	5.8	7.3	
11.2	2.1	5.7	3.0	2.4	6.5	19.6	3.4	1.7	2.1	2.7	2.6	1.4	1.5	1.8	
4.8	1.7	3.4	2.0	1.4	3.3	6.7	3.6	1.9	3.1	1.7	2.4	.7	1.6	1.7	
53.7	74.8	61.8	62.8	64.4	61.1	49.1	47.9	51.7	50.6	58.1	53.2	81.4	69.1	65.3	
21.9	16.1	22.0	21.9	22.8	21.1	17.4	33.3	35.4	33.0	27.5	31.3	11.0	22.1	23.8	
15.7	33.9	20.2	10.8	13.8	19.0	39.8	7.3	1.3	2.1	5.5	4.7	6.9	6.0	5.8	
29.7	51.6	66.2	57.1	66.6	49.0	36.4	66.7	81.6	81.5	73.9	74.7	67.3	35.9	50.9	
4.9	3.3	3.3	13.6	6.5	5.9	4.0	9.2	6.2	3.1	4.5	5.8	5.7	38.5	24.9	
43.2	1.4	2.9	3.7	4.5	17.2	9.9	4.8	2.0	1.5	4.2	3.6	9.5	9.3	7.8	
1.1	3.5	.9	5.0	.8	2.1	2.3	4.5	2.6	5.1	3.5	3.8	3.3	1.1	2.2	
5.5	6.3	6.6	9.9	7.9	6.8	7.6	7.6	6.2	6.7	8.3	7.5	7.3	9.2	8.5	
28.5	34.8	44.5	34.9	44.7	35.4	27.5	26.6	27.5	37.9	27.2	28.5	39.2	14.1	21.7	
12.7	11.4	9.4	5.4	8.7	10.2	10.3	6.4	3.0	4.6	6.6	5.6	7.5	11.3	9.2	
11.4	8.6	7.5	7.3	5.9	8.9	8.5	6.7	6.6	7.2	8.4	7.5	7.0	9.8	8.8	
10.0	3.0	.4	3.0	3.7	5.1	4.8	2.5	2.6	2.6	5.1	3.7	8.5	8.8	7.4	
2.2	1.0	.9	1.7	2.2	1.7	1.2	1.1	2.6	1.0	6.7	3.9	1.2	1.5	2.1	
29.7	35.0	30.7	37.7	27.0	31.9	40.1	49.0	51.5	40.0	37.7	43.3	29.3	45.3	42.4	
5.5	6.3	6.6	9.9	7.9	6.8	7.6	7.6	6.2	6.7	8.3	7.5	7.3	9.2	8.5	
7.4	9.3	7.7	6.9	3.4	7.2	6.2	9.0	10.5	14.9	7.4	9.3	4.1	4.7	5.9	
17.4	14.0	14.0	14.2	16.6	15.6	15.0	16.5	13.8	14.4	13.7	14.4	10.9	13.7	13.5	
18.0	12.4	12.1	8.4	18.3	14.4	13.3	14.6	13.1	15.4	18.0	15.9	15.4	15.9	15.8	
6.5	4.7	6.8	5.2	5.1	5.8	5.4	5.6	5.6	6.7	7.9	6.7	6.4	9.4	8.2	
15.4	24.7	13.6	27.6	14.0	18.8	16.4	16.8	18.7	13.3	11.8	14.5	15.9	17.0	16.2	
5.6	2.6	5.3	4.3	3.1	4.4	4.3	5.6	7.2	2.6	4.8	5.2	7.2	5.4	5.6	
8.2	3.8	9.0	6.5	7.0	7.0	7.8	7.8	10.5	7.2	9.6	9.1	9.6	7.9	8.5	
4.9	3.7	5.9	2.2	6.5	4.6	5.6	4.5	4.9	3.1	4.2	4.3	5.9	6.5	5.8	
9.6	6.3	10.5	11.4	10.4	9.5	11.3	8.1	6.9	8.7	9.8	8.7	9.0	9.5	9.2	
3.8	16.6	12.1	10.8	12.9	9.9	11.9	6.7	6.2	9.2	9.5	8.2	13.0	6.2	7.7	
3.2	1.9	3.1	2.6	2.8	2.8	2.8	4.8	2.6	4.6	3.3	3.7	2.5	3.9	3.6	

2/ Statistics are not presented because too few records contained the specified data.

SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

TABLE 2
STATISTICAL PROFILE OF DOCTORATE RECIPIENTS BY FIELD OF DOCTORATE, FY 1977 1/

DOCTORATES: WOMEN

	FY 1977 TOTAL	PHYSICS AND ASTRONOMY	CHEMISTRY	EARTH, ENVIRONM., AND MARINE SCIENCES	PHYSICAL SCIENCES	MATHEMATICS	ENGINEERING	ENG FIELDS	BASIC MEDICAL SCIENCES	OTHER BIOSCIENCES	BIOSCIENCES	MEDICAL SCIENCES	AGRICULTURAL SCIENCES	LIFE SCIENCES
TOTAL FEMALE	7845	64	180	59	303	128	74	505	399	330	729	165	63	957
FEMALE AS A PERCENT OF TOTAL DOCTORATES	24.8	5.6	11.5	8.5	8.9	13.3	2.8	7.2	22.4	23.8	23.0	24.6	6.8	20.1
U.S. CITIZENSHIP %	88.4	64.1	71.7	79.7	71.6	71.9	56.8	69.5	83.7	83.6	83.7	80.6	61.9	81.7
FOREIGN CITIZENSHIP %	8.9	34.4	27.2	20.3	27.4	26.6	41.9	29.3	13.5	13.9	13.7	18.2	38.1	16.1
UNKNOWN %	2.7	1.6	1.1	.0	1.0	1.6	1.4	1.2	2.8	2.4	2.6	1.2	.0	2.2
MARRIED %	53.5	68.8	52.2	52.5	55.8	57.0	66.2	57.6	49.9	50.3	50.1	48.5	42.9	49.3
NOT MARRIED %	42.3	28.1	43.9	45.8	40.9	39.1	32.4	39.2	45.6	46.1	45.8	49.1	57.1	47.1
UNKNOWN %	4.1	3.1	3.9	1.7	3.3	3.9	1.4	3.2	4.5	3.6	4.1	2.4	.0	3.6
MEDIAN AGE AT DOCTORATE	32.8	29.1	28.2	29.1	28.6	29.0	28.2	28.7	29.0	29.7	29.3	32.4	30.1	29.6
PERCENT WITH BACC IN SAME FIELD AS DOCTORATE	52.2	78.1	81.7	54.2	75.6	85.9	47.3	74.1	17.8	67.6	40.3	32.1	33.3	38.5
PERCENT WITH MASTERS	84.9	70.3	45.6	83.1	58.1	84.4	90.5	69.5	45.4	69.1	56.1	67.9	90.5	60.4
MEDIAN TIME LAPSE FROM BACC TO DOCT														
TOTAL TIME YRS	9.7	7.2	6.1	6.9	6.5	7.2	6.4	6.7	6.6	7.6	7.1	8.9	8.0	7.3
REGISTERED TIME YRS	6.2	6.2	5.2	5.9	5.5	5.9	5.4	5.6	5.5	6.1	5.7	5.5	5.3	5.7
POSTDOCTORAL STUDY PLANS %	14.3	51.6	50.6	37.7	48.2	8.6	16.2	33.5	75.4	44.8	61.6	37.0	20.6	54.6
FELLOWSHIP	7.7	7.8	18.9	16.9	16.2	2.3	6.8	11.3	50.6	30.9	41.7	19.4	7.9	35.6
RESEARCH ASSOC	4.3	39.1	30.0	20.3	30.0	3.1	8.1	20.0	19.8	12.4	16.5	12.7	11.1	15.5
TRAINEESHIP	.7	.0	.0	.0	.0	2.3	.0	.6	2.3	.3	1.4	2.4	.0	1.5
OTHER	1.6	4.7	1.7	.0	2.0	.8	1.4	1.6	2.8	1.2	2.1	2.4	1.6	2.1
PLANNED EMPLOYMENT AFTER DOCTORATE %	77.0	35.9	42.2	55.9	43.6	83.6	74.3	58.2	18.5	49.1	32.4	53.3	74.6	38.8
EDUC INSTITUTION	57.3	12.5	18.3	25.4	18.5	65.6	24.3	31.3	12.0	33.9	21.9	32.7	41.3	25.1
INDUSTRY/BUSINESS	4.0	9.4	17.2	13.6	14.9	9.4	31.1	15.8	2.5	3.3	2.9	5.5	12.7	4.0
GOVERNMENT	6.5	4.7	3.3	11.9	5.3	3.1	12.2	5.7	1.8	5.8	3.6	10.3	12.7	5.3
NONPROFIT	4.5	1.6	1.7	3.4	2.0	1.6	2.7	2.0	.3	2.1	1.1	3.0	4.8	1.7
OTHER & UNKNOWN	4.8	7.8	1.7	1.7	3.0	3.9	4.1	3.4	2.0	3.9	2.9	1.8	3.2	2.7
POSTDOCT STATUS UNKN %	8.7	12.5	7.2	6.8	8.3	7.8	9.5	8.3	6.0	6.1	6.0	9.7	4.8	6.6
DEFINITE POSTDOCTORAL STUDY	9.7	28.1	37.8	30.5	34.3	2.3	9.5	22.6	61.2	32.4	48.1	30.3	11.1	42.6
SEEKING POSTDOCTORAL STUDY	4.6	23.4	12.8	6.8	13.9	6.3	6.8	10.9	14.3	12.4	13.4	6.7	9.5	12.0
DEFINITE EMPLOYMENT	51.1	14.1	28.3	32.2	26.1	50.8	51.4	36.0	12.0	30.6	20.4	34.5	41.3	24.2
SEEKING EMPLOYMENT	25.9	21.9	13.9	23.7	17.5	32.8	23.0	22.2	6.5	18.5	11.9	18.8	33.3	14.5
EMPLOYMENT ACTIVITY AFTER DOCTORATE %														
PRIMARY ACTIVITY														
R & D	11.1	33.3	52.9	31.6	45.6	23.1	65.8	41.8	31.3	26.7	28.2	26.3	53.8	30.6
TEACHING	56.7	44.4	33.3	42.1	36.7	66.2	28.9	45.6	47.9	56.4	53.7	45.6	23.1	48.3
ADMINISTRATION	12.7	.0	2.0	.0	1.3	3.1	2.6	2.2	4.2	5.0	4.7	8.8	3.8	5.6
PROF. SERVICES	12.3	11.1	.0	21.1	6.3	3.1	.0	3.8	4.2	5.0	4.7	10.5	3.8	6.0
OTHER	2.0	11.1	3.9	.0	3.8	.0	.0	1.6	4.2	2.0	2.7	1.8	7.7	3.0
ACTIVITY UNKNOWN	5.2	.0	7.8	5.3	6.3	4.6	2.6	4.9	8.3	5.0	6.0	7.0	7.7	6.5
SECONDARY ACTIVITY														
R & D	28.3	22.2	21.6	42.1	26.6	47.7	23.7	33.5	27.1	35.6	32.9	26.3	19.2	29.7
TEACHING	9.9	.0	2.0	.0	1.3	13.8	5.3	6.6	16.7	8.9	11.4	19.3	30.8	15.5
ADMINISTRATION	8.5	.0	3.9	10.5	5.1	.0	5.3	3.3	8.3	6.9	7.4	8.8	.0	6.9
PROF. SERVICES	7.1	.0	2.0	5.3	2.5	4.6	2.6	3.3	4.2	3.0	3.4	1.8	3.8	3.0
OTHER	2.1	.0	.0	.0	.0	1.5	.0	.5	.0	1.0	.7	.0	.0	.4
NO SECONDARY ACTIVITY	39.0	77.8	62.7	36.8	58.2	27.7	60.5	47.8	35.4	39.6	38.3	36.8	38.5	37.9
UNKNOWN	5.2	.0	7.8	5.3	6.3	4.6	2.6	4.9	8.3	5.0	6.0	7.0	7.7	6.5
REGION OF EMPLOYMENT AFTER DOCTORATE %														
NEW ENGLAND	8.1	11.1	7.8	10.5	8.9	12.3	.0	8.2	4.2	9.9	8.1	5.3	.0	6.5
MIDDLE ATLANTIC	15.2	11.1	27.5	5.3	20.3	15.4	26.3	19.8	12.5	7.9	9.4	14.0	.0	9.5
EAST NO CENTRAL	15.9	22.2	23.5	15.8	21.5	24.6	5.3	19.2	12.5	12.9	12.8	12.3	11.5	12.5
WEST NO CENTRAL	6.8	.0	2.0	.0	1.3	3.1	.0	1.6	6.3	7.9	7.4	3.5	15.4	7.3
SOUTH ATLANTIC	17.2	22.2	11.8	10.5	12.7	12.3	18.4	13.7	16.7	23.8	21.5	21.1	23.1	21.6
EAST SO CENTRAL	5.2	.0	3.9	.0	2.5	1.5	10.5	3.8	6.3	5.0	5.4	5.3	15.4	6.5
WEST SO CENTRAL	8.1	.0	2.0	5.3	2.5	9.2	10.5	6.6	2.1	7.9	6.0	10.5	.0	6.5
MOUNTAIN	5.1	.0	.0	21.1	5.1	1.5	5.3	3.8	4.2	3.0	3.4	1.8	7.7	3.4
PACIFIC & INSULAR	9.7	33.3	7.8	15.8	12.7	7.7	15.8	11.5	16.7	6.9	10.1	8.8	3.8	9.1
FOREIGN	5.2	.0	13.7	15.8	12.7	9.2	7.9	10.4	10.4	9.9	10.1	15.8	23.1	12.9
REGION UNKNOWN	3.5	.0	.0	.0	.0	3.1	.0	1.1	8.3	5.0	6.0	1.8	.0	4.3

1/ Refer to explanatory note on page 12 and the description of doctoral field groupings inside back cover.

TABLE 2. CONTINUED

DOCTORATES: WOMEN

PSYCHOLOGY	ECONOMICS	ANTHROPOLOGY & SOCIOLOGY	POLIT. SCI., PUBLIC ADM'N, INTERN'L REL.	OTHER SOCIAL SCIENCES	SOCIAL SCIENCES INCL. PSYCHOL.	TOTAL SCIENCES	HISTORY	ENG. AND AMER. LANG. AND LIT.	FOREIGN LANG. AND LIT.	OTHER HUMANITIES	HUMANITIES	PROFESSIONAL FIELDS	EDUCATION	TOTAL NON-SCIENCES	OTHER OR UNSPECIFIED 2/
1081	73	373	142	161	1830	3292	216	489	403	548	1656	303	2584	4543	10
36.5	8.7	33.6	16.1	22.5	28.1	18.0	22.5	45.3	51.1	31.7	36.3	22.6	34.7	34.0	22.7
91.6	71.2	89.5	90.8	87.6	89.9	84.4	90.7	93.0	85.6	88.1	89.3	86.8	93.1	91.3	
4.2	28.8	8.3	6.3	9.9	6.7	12.9	4.6	4.3	11.4	8.8	7.5	11.6	4.5	6.1	
4.3	.0	2.1	2.8	2.5	3.4	2.7	4.6	2.7	3.0	3.1	3.1	1.7	2.4	2.6	
50.5	47.9	50.9	56.3	47.8	50.7	51.4	55.1	55.8	55.1	46.5	52.5	51.8	57.0	55.0	
43.8	52.1	45.6	38.0	44.7	44.2	44.3	38.4	40.1	40.2	48.7	42.8	45.9	39.3	41.0	
5.6	.0	3.5	5.6	7.5	5.1	4.4	6.5	4.1	4.7	4.7	4.8	2.3	3.7	4.0	
30.0	29.6	32.8	31.7	31.6	30.7	30.0	33.4	33.2	32.7	33.1	33.1	34.4	37.6	35.2	
62.3	68.5	56.8	52.8	21.1	57.1	54.3	62.0	80.2	71.2	45.3	64.1	36.0	44.1	50.8	
74.2	74.0	88.2	82.4	91.9	79.2	72.3	94.0	91.0	88.8	87.8	89.8	94.7	96.7	94.1	
7.2	7.8	9.3	9.4	9.4	7.9	7.5	10.5	10.2	9.9	10.3	10.2	11.6	13.2	11.8	
5.5	5.8	6.9	6.7	6.2	5.9	5.8	7.8	7.4	7.4	7.3	7.4	5.8	6.3	6.7	
15.0	5.5	10.7	7.0	3.1	12.1	27.7	8.3	3.3	6.5	6.2	5.7	4.3	3.9	4.6	
8.0	1.4	7.2	2.8	1.2	6.6	15.8	4.6	1.4	3.7	2.7	2.8	1.7	1.2	1.8	
2.5	4.1	2.1	2.1	1.2	2.3	8.9	.5	.2	1.0	1.3	.8	1.7	1.0	1.0	
2.1	.0	.0	.0	.0	1.3	1.2	.0	.0	.0	.4	.1	.7	.5	.4	
2.3	.0	1.3	2.1	.6	1.9	1.9	3.2	1.6	1.7	1.8	1.9	.3	1.1	1.4	
75.6	86.3	82.0	81.0	85.7	78.6	63.9	74.5	84.0	81.6	83.2	81.9	89.1	89.2	86.6	
39.4	53.4	70.5	50.0	72.7	50.1	39.9	61.6	72.8	71.2	69.5	69.9	69.0	70.0	69.9	
4.5	5.5	2.1	7.0	3.7	4.2	5.9	1.9	3.3	2.0	2.2	2.4	4.3	2.6	2.6	
12.4	15.1	2.7	12.7	3.7	9.8	7.9	1.4	1.2	1.0	1.5	1.3	5.6	8.1	5.5	
12.9	2.7	2.7	7.0	3.7	9.1	5.9	2.3	.6	1.5	3.8	2.1	7.6	3.8	3.4	
6.4	9.6	4.0	4.2	1.9	5.5	4.3	7.4	6.1	6.0	6.2	6.3	2.6	4.7	5.1	
9.4	8.2	7.2	12.0	11.2	9.3	8.4	17.1	12.7	11.9	10.6	12.4	6.6	6.9	8.9	
9.7	4.1	7.2	3.5	1.2	7.8	20.2	4.2	1.6	1.7	2.4	2.2	2.0	2.1	2.1	
5.3	1.4	3.5	3.5	1.9	4.3	7.6	4.2	1.6	4.7	3.8	3.4	2.3	1.8	2.4	
50.1	68.5	58.2	60.6	59.6	54.2	42.7	39.4	51.1	47.4	51.3	48.7	68.0	61.4	57.2	
25.4	17.8	23.9	20.4	26.1	24.5	21.2	35.2	32.9	34.2	31.9	33.2	21.1	27.8	29.3	
13.7	30.0	19.4	18.6	14.6	16.2	21.9	2.4	3.2	1.0	5.0	3.2	8.7	5.9	5.3	
35.8	58.0	69.6	52.3	71.9	49.2	48.6	71.8	82.0	88.5	83.6	83.0	66.5	49.1	61.0	
4.2	.0	3.2	17.4	4.2	4.9	4.7	9.4	3.6	3.1	2.5	3.7	13.6	24.2	17.0	
42.1	4.0	1.8	1.2	2.1	23.9	18.4	2.4	3.6	1.0	1.8	2.2	8.3	12.6	9.0	
1.3	2.0	.9	4.7	3.1	1.7	1.9	3.5	2.0	1.6	2.8	2.4	1.0	2.0	2.0	
3.0	6.0	5.1	5.8	4.2	3.9	4.5	10.6	5.6	4.7	4.3	5.5	1.9	3.1	5.6	
32.1	38.0	46.5	36.0	38.5	36.5	35.0	40.0	26.8	35.1	37.7	34.0	36.4	18.4	24.7	
14.9	8.0	7.8	7.0	12.5	12.1	12.0	4.7	4.4	.5	2.5	2.9	12.1	11.2	8.7	
10.0	4.0	6.5	4.7	4.2	7.9	7.1	4.7	8.0	6.8	7.1	7.1	10.2	10.1	9.2	
8.3	2.0	2.8	3.5	5.2	6.1	5.2	1.2	1.6	1.0	4.3	2.4	9.7	10.9	8.2	
1.3	.0	.0	4.7	4.2	1.5	1.2	3.5	2.8	.0	5.0	3.0	1.0	2.6	2.6	
30.4	42.0	31.3	38.4	31.3	32.0	35.0	35.3	50.8	51.8	39.1	45.4	28.6	40.6	41.2	
3.0	6.0	5.1	5.8	4.2	3.9	4.5	10.6	5.6	4.7	4.3	5.5	1.9	6.1	5.6	
10.5	12.0	9.7	5.8	3.1	9.3	8.7	4.7	12.8	16.8	9.3	11.6	6.3	5.9	7.7	
19.9	10.0	15.7	22.1	9.4	17.7	16.6	24.7	18.4	19.9	17.1	19.0	14.6	12.3	14.5	
13.1	10.0	12.9	12.8	21.9	13.7	14.2	22.4	16.4	13.6	17.1	16.6	20.4	16.5	16.8	
6.1	2.0	5.5	3.5	3.1	5.2	5.1	7.1	6.4	4.7	7.5	6.4	6.3	8.6	7.7	
17.0	28.0	15.2	26.7	13.5	17.7	17.8	16.5	14.4	11.0	10.7	12.5	12.6	19.5	16.8	
4.1	4.0	4.6	3.5	6.3	4.3	4.6	4.7	4.0	3.7	2.5	3.5	7.3	6.3	5.5	
6.5	.0	7.4	3.5	5.2	6.0	6.1	1.2	9.2	6.8	7.8	7.3	11.7	9.8	9.2	
4.6	6.0	8.8	2.3	9.4	5.9	5.2	7.1	2.4	2.6	3.9	3.5	4.4	5.9	5.0	
10.1	10.0	11.1	8.1	17.7	10.9	10.7	4.7	8.4	12.0	14.2	10.9	8.3	8.3	9.1	
3.1	12.0	6.9	3.5	7.3	4.8	6.9	4.7	2.8	5.8	7.5	5.3	7.8	3.3	4.3	
5.0	6.0	2.3	8.1	3.1	4.5	4.1	2.4	4.8	3.1	2.5	3.3	.5	3.5	3.2	

2/ Statistics are not presented because too few records contained the specified data.

SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

TABLE 3
PERCENTAGE OF FY 1977 DOCTORATE RECIPIENTS BY SOURCES OF SUPPORT IN GRADUATE SCHOOL, BY SEX AND SUMMARY FIELD [1]

SOURCES OF SUPPORT IN GRADUATE SCHOOL		DOCTORATE RECIPIENTS BY FIELD							
		PHYSICAL [2] SCIENCES	ENGI-NEERING	LIFE SCIENCES	SOCIAL SCIENCES	HUMANITIES	PROF. FIELDS	EDUCATION	TOTAL
		MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN
NSF FELLOWSHIP	N	285/ 28	135/ 5	140/ 49	165/ 63	18/ 10	6/ 0	96/ 32	845/ 187
	V%	7.6/ 6.8	5.5/ 7.1	3.8/ 5.3	3.8/ 3.7	.7/ .6	.6/ .0	2.1/ 1.3	3.7/ 2.5
	H%	33.7/15.0	16.0/ 2.7	16.6/26.2	19.5/33.7	2.1/ 5.3	.7/ .0	11.4/17.1	100.0/100.0
NSF TRAINEESHIP	N	197/ 21	103/ 5	88/ 43	90/ 25	6/ 5	2/ 3	10/ 4	496/ 106
	V%	5.2/ 5.1	4.2/ 7.1	2.4/ 4.7	2.0/ 1.5	.2/ .3	.2/ 1.0	.2/ .2	2.2/ 1.4
	H%	39.7/19.8	20.8/ 4.7	17.7/40.6	18.1/23.6	1.2/ 4.7	.4/ 2.8	2.0/ 3.8	99.9/100.0
NIH FELLOWSHIP	N	37/ 8	20/ 2	188/ 52	162/ 119	4/ 1	13/ 9	14/ 16	438/ 207
	V%	1.0/ 1.9	.8/ 2.9	5.2/ 5.7	3.7/ 6.9	.1/ .1	1.3/ 3.1	.3/ .7	1.9/ 2.8
	H%	8.4/ 3.9	4.6/ 1.0	42.9/25.1	37.0/57.5	.9/ .5	3.0/ 4.3	3.2/ 7.7	100.0/100.0
NIH TRAINEESHIP	N	42/ 9	47/ 0	731/ 276	310/ 164	2/ 1	21/ 18	10/ 19	1183/ 487
	V%	1.7/ 2.2	1.9/ .0	20.0/30.0	7.0/ 9.6	.1/ .1	2.1/ 6.3	.2/ .8	5.2/ 6.6
	H%	5.2/ 1.8	4.0/ .0	61.8/56.7	26.2/33.7	.2/ .2	1.8/ 3.7	.8/ 3.9	100.0/100.0
NDEA FELLOWSHIP	N	176/ 30	62/ 2	108/ 32	260/ 88	400/ 214	30/ 6	126/ 58	1162/ 430
	V%	4.7/ 7.3	2.5/ 2.9	3.0/ 3.5	5.9/ 5.1	14.8/13.8	3.0/ 2.1	2.7/ 2.4	5.1/ 5.8
	H%	15.1/ 7.0	5.3/ .5	9.3/ 7.4	22.4/20.5	34.4/49.8	2.6/ 1.4	10.8/13.5	99.9/100.1
NATIONAL DIRECT STUDENT LOANS	N	184/ 10	97/ 3	237/ 46	589/ 182	479/ 176	99/ 23	485/ 204	2170/ 644
	V%	4.9/ 2.4	3.9/ 4.3	6.5/ 5.0	13.4/10.6	17.7/11.4	10.1/ 8.0	10.5/ 8.3	9.6/ 8.7
	H%	8.5/ 1.6	4.5/ .5	10.9/ 7.1	27.1/28.3	22.1/27.3	4.6/ 3.6	22.4/31.7	100.1/100.1
OTHER HEW	N	21/ 3	21/ 0	96/ 45	267/ 181	27/ 10	63/ 39	198/ 163	693/ 441
	V%	.6/ .7	.9/ .0	2.6/ 4.9	6.1/10.5	1.0/ .6	6.4/13.5	4.3/ 6.6	3.1/ 5.9
	H%	3.0/ .7	3.0/ .0	13.9/10.2	38.5/41.0	3.9/ 2.3	9.1/ 8.8	28.6/37.0	100.0/100.0
NASA TRAINEESHIP	N	41/ 3	45/ 1	10/ 0	10/ 2	0/ 0	0/ 2	1/ 2	107/ 10
	V%	1.1/ .7	1.8/ 1.4	.3/ .0	.2/ .1	.0/ .0	.0/ .7	.0/ .1	.5/ .1
	H%	38.3/30.0	42.1/10.0	9.3/ .0	9.3/20.0	.0/ .0	.0/20.0	.9/20.0	99.9/100.0
GI BILL	N	410/ 2	199/ 0	471/ 6	642/ 7	366/ 3	198/ 0	816/ 18	3102/ 36
	V%	10.9/ .5	8.1/ .0	12.9/ .7	14.6/ .4	13.5/ .2	20.1/ .0	17.6/ .7	13.7/ .5
	H%	13.2/ 5.6	6.4/ .0	15.2/16.7	20.7/19.4	11.8/ 8.3	6.4/ .0	26.3/50.0	100.0/100.0
OTHER FEDERAL [3] SUPPORT	N	237/ 20	229/ 6	225/ 41	390/ 133	122/ 59	55/ 22	173/ 72	1431/ 353
	V%	6.3/ 4.8	9.3/ 8.6	6.2/ 4.5	8.9/ 7.8	4.5/ 3.8	5.6/ 7.6	3.7/ 2.9	6.3/ 4.8
	H%	16.6/ 5.7	16.0/ 1.7	15.7/11.6	27.3/37.7	8.5/16.7	3.8/ 6.2	12.1/20.4	100.0/100.0
WOODROW WILSON FELLOWSHIP	N	12/ 1	1/ 0	2/ 1	30/ 21	73/ 53	2/ 0	6/ 3	126/ 79
	V%	.3/ .2	.0/ .0	.1/ .1	.7/ 1.2	2.7/ 3.4	.2/ .0	.1/ .1	.6/ 1.1
	H%	9.5/ 1.3	.8/ .0	1.6/ 1.3	23.8/26.6	57.9/67.1	1.6/ .0	4.8/ 3.8	100.0/100.1
OTHER NATIONAL FELLOWSHIP	N	78/ 11	40/ 5	67/ 23	181/ 81	158/ 114	26/ 11	70/ 61	620/ 306
	V%	2.1/ 2.7	1.6/ 7.1	1.8/ 2.5	4.1/ 4.7	5.8/ 7.4	2.6/ 3.8	1.5/ 2.5	2.7/ 4.1
	H%	12.6/ 3.6	6.5/ 1.6	10.8/ 7.5	29.2/26.5	25.5/37.3	4.2/ 3.6	11.3/19.9	100.1/100.0
UNIVERSITY FELLOWSHIP	N	793/ 94	384/ 19	545/ 165	997/ 327	924/ 547	206/ 53	477/ 285	4326/ 1490
	V%	21.1/22.8	15.6/27.1	14.9/17.9	22.7/19.1	34.1/35.4	20.9/18.4	10.3/11.6	19.2/ 20.1
	H%	18.3/ 6.3	8.9/ 1.3	12.6/11.1	23.0/21.9	21.4/36.7	4.8/ 3.6	11.0/19.1	100.0/100.0
TEACHING ASSISTANTSHIP	N	2633/ 302	992/ 32	1486/ 387	2343/ 827	1763/ 986	457/ 93	1177/ 703	10851/ 3330
	V%	70.1/73.1	40.3/45.7	40.8/42.1	53.3/48.2	65.1/63.7	46.4/32.3	25.4/28.6	48.0/ 44.9
	H%	24.3/ 9.1	9.1/ 1.0	13.7/11.6	21.6/24.8	16.2/29.6	4.2/ 2.8	10.8/21.1	99.9/100.0
RESEARCH ASSISTANTSHIP	N	2411/ 247	1657/ 49	1722/ 362	1714/ 598	376/ 193	280/ 73	774/ 426	8934/ 1948
	V%	64.2/59.8	67.2/70.0	47.2/39.3	39.0/34.8	13.9/12.5	28.5/25.3	16.7/17.3	39.6/ 26.3
	H%	27.0/12.7	18.5/ 2.5	19.3/18.6	19.2/30.7	4.2/ 9.9	3.1/ 3.7	8.7/21.9	100.0/100.0
EDUC. FUNDS OF INDUSTRY	N	198/ 25	244/ 9	97/ 19	80/ 28	32/ 19	66/ 5	114/ 41	831/ 146
	V%	5.3/ 6.1	9.9/12.9	2.7/ 2.1	1.8/ 1.6	1.2/ 1.2	6.7/ 1.7	2.5/ 1.7	3.7/ 2.0
	H%	23.8/17.1	29.4/ 6.2	11.7/13.0	9.6/19.2	3.9/13.0	7.9/ 3.4	13.7/28.1	100.0/100.0
OTHER INSTITUTION FUNDS	N	201/ 25	106/ 1	284/ 77	411/ 166	248/ 160	82/ 33	414/ 304	1746/ 766
	V%	5.4/ 6.1	4.3/ 1.4	7.8/ 8.4	9.3/ 9.7	9.2/10.3	8.3/11.5	8.9/12.4	7.7/ 10.3
	H%	11.5/ 3.3	6.1/ .1	16.3/10.1	23.5/21.7	14.2/20.9	4.7/ 4.3	23.7/39.7	100.0/100.1
OWN EARNINGS	N	1196/ 127	947/ 20	1295/ 294	2575/ 957	1708/ 912	661/ 182	3603/1779	11985/ 4271
	V%	31.9/30.8	38.4/28.6	35.5/32.0	58.5/55.8	63.1/59.0	67.2/63.2	77.8/72.3	53.1/ 57.6
	H%	10.0/ 3.0	7.9/ .5	10.8/ 6.9	21.5/22.4	14.3/21.4	5.5/ 4.3	30.1/41.7	100.1/100.2
SPOUSE'S EARNINGS	N	1087/ 98	563/ 17	1309/ 226	1557/ 573	1073/ 537	367/ 99	1481/ 881	7437/ 2431
	V%	29.0/23.7	22.8/24.3	35.9/24.6	35.4/33.4	39.6/34.7	37.3/34.4	32.0/35.8	32.9/ 32.8
	H%	14.6/ 4.0	7.6/ .7	17.6/ 9.3	20.9/23.6	14.4/22.1	4.9/ 4.1	19.9/36.2	99.9/100.0
FAMILY CONTRIBUTIONS	N	432/ 45	344/ 6	534/ 146	805/ 346	585/ 366	143/ 40	535/ 292	3378/ 1241
	V%	11.5/10.9	14.0/ 8.6	14.6/15.9	18.3/20.2	21.6/23.7	14.5/13.9	11.5/11.9	15.0/ 16.7
	H%	12.8/ 3.6	10.2/ .5	15.8/11.8	23.8/27.9	17.3/29.5	4.2/ 3.2	15.8/23.5	99.9/100.0
OTHER LOANS	N	230/ 14	173/ 5	307/ 75	634/ 226	411/ 192	138/ 29	588/ 261	2481/ 802
	V%	6.1/ 3.4	7.0/ 7.1	8.4/ 8.2	14.4/13.2	15.2/12.4	14.0/10.1	12.7/10.6	11.0/ 10.8
	H%	9.3/ 1.7	7.0/ .6	12.4/ 9.4	25.6/28.2	16.6/23.9	5.6/ 3.6	23.7/32.5	100.2/ 99.9
OTHER	N	203/ 23	150/ 3	266/ 61	318/ 127	204/ 142	78/ 32	273/ 166	1492/ 554
	V%	5.4/ 5.6	6.1/ 4.3	7.3/ 6.6	7.2/ 7.4	7.5/ 9.2	7.9/11.1	5.9/ 6.8	6.6/ 7.5
	H%	13.6/ 4.2	10.1/ .5	17.8/11.0	21.3/22.9	13.7/25.6	5.2/ 5.8	18.3/30.0	100.0/100.0
UNDUPLICATED TOTAL	N	3754/ 413	2664/ 70	3646/ 920	4398/1716	2707/1547	984/ 288	4633/2459	22586/ 7413 [4]

1/ Data are not comparable with data for earlier years because of a change in the survey question on source of support. Frequencies as reported are not reliable but relative frequencies should serve as useful approximations. See discussion on page 13.
2/ Includes mathematics.
3/ Includes AEC/ERDA Fellowship which was formerly shown separately.
4/ The 14 individuals shown in Table 1 as having subfield "Other and Unspecified" are omitted from this table.

SOURCE: NRC, Comission on Human Resources, Doctorate Records File.

TABLE 4
NUMBER OF DOCTORATE RECIPIENTS BY SEX, STATE OF DOCTORAL INSTITUTION AND SUMMARY FIELD, FY 1977 [1]

STATE OF DOCTORAL INSTITUTION	NUMBER OF DOCTORATE RECIPIENTS BY FIELD																	
	PHYSICAL [2] SCIENCES		ENGINEERING		LIFE SCIENCES		SOCIAL SCIENCES		HUMANITIES		PROF. FIELDS		EDUCATION		OTHER & UNSPEC.		TOTAL	
	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN
U.S. TOTAL	3938	431	2567	74	3810	957	4674	1830	2903	1656	1037	303	4864	2584	34	10	23827	7845
ALABAMA	18	0	12	2	42	11	23	2	0	7	7	1	85	47	0	0	187	70
ALASKA	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	5	0
ARIZONA	66	3	29	1	54	16	61	19	17	9	11	0	86	43	0	0	324	91
ARKANSAS	9	0	7	0	10	0	7	2	7	6	16	0	24	18	0	0	80	26
CALIFORNIA	529	49	448	9	413	123	578	197	304	180	86	20	294	156	4	0	2656	734
COLORADO	85	5	44	0	69	11	107	34	44	29	18	5	175	77	0	0	542	161
CONNECTICUT	63	11	23	1	71	24	89	24	85	64	9	3	36	19	1	0	377	146
DELAWARE	14	2	7	0	4	2	9	2	3	3	0	0	1	2	0	0	38	11
D. C.	50	11	30	0	22	23	117	53	54	46	23	6	72	48	0	1	368	188
FLORIDA	91	10	43	4	101	17	134	60	46	32	26	6	440	205	0	1	881	335
GEORGIA	49	5	36	0	74	17	84	26	48	19	31	2	83	63	0	0	405	132
HAWAII	17	2	7	0	26	7	39	9	14	7	0	0	2	5	0	0	105	30
IDAHO	12	1	3	0	13	1	2	0	5	2	0	0	10	0	0	0	45	4
ILLINOIS	232	27	160	7	207	36	300	115	173	93	71	25	213	132	4	1	1380	436
INDIANA	152	8	87	6	118	26	141	46	126	55	48	10	177	74	0	0	849	225
IOWA	67	10	48	0	79	11	59	13	60	22	16	2	92	33	1	0	422	91
KANSAS	27	3	26	0	57	11	47	23	21	16	10	4	94	32	1	0	283	89
KENTUCKY	11	3	11	0	32	6	33	7	17	12	16	0	24	8	0	0	144	36
LOUISIANA	36	4	19	0	41	8	41	8	40	15	37	2	28	25	0	0	242	62
MAINE	4	0	6	0	7	0	3	1	1	0	0	0	13	3	0	0	34	4
MARYLAND	90	17	45	4	84	33	69	36	57	31	9	2	66	69	0	0	420	192
MASSACHUSETTS	299	38	172	11	142	64	277	120	191	120	61	22	224	133	1	0	1367	508
MICHIGAN	129	16	82	2	216	31	219	83	138	77	53	22	273	145	1	0	1111	376
MINNESOTA	35	4	32	0	97	17	82	38	51	25	16	10	66	35	1	0	380	129
MISSISSIPPI	13	1	9	0	44	6	37	12	17	5	14	0	82	38	0	0	216	62
MISSOURI	68	8	68	0	65	16	87	30	46	24	34	9	122	47	0	0	490	134
MONTANA	12	0	1	0	13	3	13	0	0	0	0	0	20	1	0	0	59	4
NEBRASKA	14	3	3	0	39	6	28	12	22	11	14	0	48	18	0	0	168	50
NEVADA	13	0	0	0	3	0	8	4	2	0	0	0	0	3	0	0	26	7
NEW HAMPSHIRE	22	3	3	0	12	1	6	3	3	3	0	0	0	0	0	0	46	10
NEW JERSEY	115	25	64	3	72	30	89	25	92	29	6	11	83	50	0	0	521	173
NEW MEXICO	26	2	17	1	13	3	15	3	20	21	0	0	28	14	0	0	119	44
NEW YORK	397	51	245	3	354	122	586	309	365	257	98	31	365	257	3	3	2413	1033
NORTH CAROLINA	90	6	45	0	126	27	95	53	80	51	16	7	70	32	0	0	522	176
NORTH DAKOTA	9	0	0	0	23	2	8	4	2	0	0	0	15	1	0	0	57	7
OHIO	156	16	100	2	129	44	204	78	126	58	68	29	235	130	5	0	1023	357
OKLAHOMA	39	1	40	1	53	12	50	20	23	12	11	4	82	40	0	0	298	90
OREGON	53	7	11	0	78	9	55	32	27	18	12	2	75	25	0	1	311	94
PENNSYLVANIA	194	25	144	8	148	37	225	91	148	92	53	23	262	123	8	1	1182	400
RHODE ISLAND	58	7	17	0	19	4	28	16	35	19	0	0	0	0	0	0	157	46
SOUTH CAROLINA	35	3	10	0	19	1	16	5	17	6	8	1	28	21	0	0	133	37
SOUTH DAKOTA	0	0	1	0	7	2	6	1	0	0	0	0	14	15	0	0	28	18
TENNESSEE	34	6	53	2	57	20	75	37	50	25	8	13	89	77	0	0	366	180
TEXAS	191	17	157	5	184	38	175	74	123	54	87	12	254	158	1	1	1172	359
UTAH	47	1	27	0	48	10	69	15	22	6	6	7	138	32	0	0	357	71
VERMONT	3	1	1	0	11	1	5	6	2	3	0	0	0	0	0	0	22	11
VIRGINIA	52	1	56	2	71	12	55	9	30	11	6	0	110	54	0	0	380	89
WASHINGTON	67	3	37	0	83	14	71	38	50	22	15	3	37	20	2	0	362	100
WEST VIRGINIA	6	1	9	0	23	7	18	6	8	1	0	0	30	13	0	0	94	28
WISCONSIN	122	12	50	0	120	33	120	28	89	58	17	9	85	39	1	1	604	180
WYOMING	14	2	2	0	14	2	9	1	1	0	0	0	14	4	0	0	54	9
PUERTO RICO	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0

1/ Refer to explanatory note on page 13.
2/ Includes mathematics.

SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

TABLE 5
STATISTICAL PROFILE OF DOCTORATE RECIPIENTS BY RACIAL OR ETHNIC GROUP AND U.S. CITIZENSHIP STATUS, FY 1977 1/

		TOTAL				AMER. INDIAN	ASIAN				BLACK			
		U.S.	NON-U.S. PERM.	NON-U.S. TEMP.	TOTAL	TOTAL	U.S.	NON-U.S. PERM.	NON-U.S. TEMP.	TOTAL	U.S.	NON-U.S. PERM.	NON-U.S. TEMP.	TOTAL
TOTAL NUMBER		26007	1364	3447	31672 3/	220	338	569	1117	2052 4/	1109	77	248	1446 4/
MALE	V%	73.3	80.8	87.3	75.2	72.3	74.0	85.4	85.4	83.5	61.4	89.6	94.8	68.5
FEMALE	V%	26.7	19.2	12.7	24.8	27.7	26.0	14.6	14.6	16.5	38.6	10.4	5.2	31.5
DOCTORAL FIELD														
PHYSICAL SCIENCES 5/	V%	12.8	19.6	19.6	13.8	7.7	18.0	28.5	25.2	25.1	3.8	2.6	6.0	4.1
ENGINEERING	V%	5.6	23.8	22.4	8.3	5.5	19.8	31.8	25.2	26.1	1.0	5.2	7.7	2.4
LIFE SCIENCES	V%	14.4	17.3	19.3	15.1	16.8	18.3	21.1	21.1	20.6	5.0	15.6	22.2	8.5
SOCIAL SCIENCES	V%	21.2	14.7	16.4	20.5	21.8	16.3	9.0	13.0	12.3	17.9	27.3	24.6	19.6
ARTS & HUMANITIES	V%	15.6	11.7	6.3	14.4	14.1	11.2	1.9	4.3	4.8	8.6	16.9	12.5	9.7
EDUCATION	V%	26.1	7.9	11.0	23.5	31.4	11.8	4.6	8.2	7.8	60.0	28.6	22.2	51.8
PROFESSIONS & OTHER	V%	4.3	5.0	5.0	4.4	2.7	4.4	3.2	2.9	3.2	3.7	3.9	4.8	3.9
MEDIAN AGE AT DOCTORATE		31.6	32.1	31.3	31.6	33.7	32.8	31.1	31.0	31.3	35.9	35.3	33.4	35.2
MEDIAN TIME LAPSE BA-PHD														
TOTAL TIME		8.8	8.8	8.0	8.7	9.9	9.8	8.2	8.0	8.3	11.9	8.8	7.3	10.3
REGISTERED TIME		6.1	6.3	5.5	6.1	6.3	6.5	6.1	5.7	5.9	5.9	6.5	5.0	5.7
GRADUATE SCHOOL SUPPORT														
FEDERAL FELLOW/TRAINEE	V%	27.6	11.0	9.6	24.2	26.4	29.3	11.2	9.4	13.1	24.3	3.9	7.3	20.1
GI BILL	V%	12.1	.1	.0	9.9	14.1	4.1	.0	.0	.7	12.9	.0	.0	9.9
OTHER FELLOWSHIP	V%	21.1	23.4	22.5	20.8	16.8	22.8	20.2	20.8	20.7	28.0	22.1	22.6	26.8
TEACHING ASSISTANTSHIP	V%	46.9	49.0	38.3	44.8	46.4	44.4	49.2	39.0	42.4	25.9	31.2	33.9	27.3
RESEARCH ASSISTANTSHIP	V%	32.6	51.9	48.7	34.4	30.0	44.1	69.9	58.4	58.6	15.0	33.8	27.8	18.2
EDUC./INST. FUNDS	V%	11.2	8.3	11.9	10.8	11.8	12.7	7.4	10.5	9.8	12.2	5.2	16.5	12.6
OWN/SPOUSE EARNINGS	V%	70.8	53.3	30.1	63.8	78.6	61.2	42.5	23.1	34.6	67.4	74.0	34.7	61.8
FAMILY CONTRIBUTIONS	V%	14.9	15.5	15.5	14.6	12.7	14.8	16.3	21.3	18.6	9.3	13.0	10.5	9.6
NATL DIRECT STDNT LOAN	V%	10.4	6.6	.6	8.9	16.4	8.9	3.5	.4	2.7	14.8	23.4	.4	12.7
OTHER LOANS	V%	11.5	8.6	5.4	10.4	20.5	10.1	4.0	2.6	4.2	14.6	23.4	7.7	13.8
OTHER	V%	4.7	4.7	22.0	6.5	4.5	2.7	2.5	12.6	8.0	5.7	7.8	31.5	10.4
UNKNOWN	V%	2.6	1.9	4.0	5.2	.9	1.2	1.9	2.0	2.8	2.3	1.3	3.2	2.8
POSTDOCTORAL STUDY PLANS	V%	16.1	25.5	24.6	17.0	14.5	19.8	35.7	33.5	31.4	6.9	10.4	13.3	8.2
PLANNED EMPLOYMENT AFTER DOCTORATE	V%	78.9	69.4	68.6	75.4	82.7	75.1	60.6	61.2	62.7	88.0	84.4	78.6	85.8
EDUC. INSTITUTION	V%	52.7	35.7	41.3	49.4	55.9	40.2	20.9	35.5	31.9	69.3	57.1	51.6	65.3
INDUSTRY/BUSINESS	V%	8.9	23.1	10.4	9.5	10.0	20.4	32.5	12.4	19.2	3.5	6.5	4.0	3.7
GOVERNMENT	V%	9.5	3.9	10.6	9.2	10.0	8.9	3.3	9.3	7.5	9.5	11.7	14.5	10.4
NON-PROFIT	V%	4.4	2.6	2.4	4.0	4.1	2.7	1.8	2.2	2.1	3.1	1.3	2.4	2.8
OTHER & UNKNOWN	V%	3.3	4.1	3.9	3.4	2.7	3.0	2.1	1.9	2.1	2.7	7.8	6.0	3.6
POSTDOCT STATUS UNKNOWN	V%	4.9	5.1	6.9	7.5	2.7	5.0	3.7	5.3	5.8	5.1	5.2	8.1	6.0
DEFINITE POSTDOCT STUDY	V%	12.1	15.3	14.4	12.2	8.2	13.0	20.9	20.1	18.9	4.3	3.9	6.5	4.7
SEEKING POSTDOCT STUDY	V%	4.0	10.2	10.2	4.8	6.4	7.8	14.8	13.4	12.5	2.5	6.5	6.9	3.5
DEFINITE EMPLOYMENT	V%	57.3	41.7	47.1	54.1	60.0	50.0	35.1	40.1	39.9	61.7	40.3	49.2	58.0
SEEKING EMPLOYMENT	V%	21.6	27.6	21.5	21.3	22.7	25.1	25.5	21.1	22.9	26.3	44.2	29.4	27.9
EMPLOYMENT LOCATION AFTER DOCTORATE														
U.S.	V% 7/	94.9	85.2	23.7	87.8	93.2	92.9	90.0	27.2	56.2	94.0	67.7	16.4	81.6
FOREIGN	V% 7/	2.0	10.7	72.2	8.9	3.8	1.2	6.0	68.1	39.0	1.0	22.6	77.9	13.0
UNKNOWN	V% 7/	3.1	4.0	4.1	3.3	3.0	5.9	4.0	4.7	4.8	5.0	9.7	5.7	5.4

1/ Data not comparable with data for earlier years because of changes in the survey question on racial/ethnic group. See discussion on page 13.
2/ See definition on page 30. The definition used in this survey is not consistent with the guidance received from OMB in July 1977, subsequent to this survey, which defines "Hispanic" more restrictively to exclude persons from Portugal and to include only those persons from Central and South America who are of Spanish origin, descent or culture. Under the revised definition persons from Brazil, Guiana, Surinam, Trinidad, and Belize would be classified according to their race, and would not necessarily be included in the Hispanic category.
3/ Includes 854 individuals who did not report their citizenship at time of doctorate.

TABLE 5. CONTINUED

HISPANIC[2]				WHITE				OTHER & UNKNOWN			TOTAL			
U.S.	NON-U.S. PERM.	NON-U.S. TEMP.	TOTAL	U.S.	NON-U.S. PERM.	NON-U.S. TEMP.	TOTAL	U.S.	NON-U.S.	TOTAL	U.S.	NON-U.S. PERM.	NON-U.S. TEMP.	TOTAL
421	50	232	714 [4]	22824	587	1448	24920 [4]	1102	476	2320 [4][5]	26007	1364	3447	31672[3]
73.6	70.0	90.5	79.1	73.7	75.8	86.5	74.5	77.1	88.0	78.8	73.3	80.8	87.3	75.2
26.4	30.0	9.5	20.9	26.3	24.2	13.5	25.5	22.9	12.0	21.2	26.7	19.2	12.7	24.8
11.2	18.0	20.3	14.6	13.0	13.3	17.7	13.3	17.6	19.1	15.5	12.8	19.6	19.6	13.8
4.3	8.0	17.2	8.8	5.6	21.1	23.5	7.1	6.5	21.8	10.1	5.6	23.8	22.4	8.3
7.1	10.0	32.8	15.8	15.0	14.1	15.3	15.0	13.0	19.5	14.5	14.4	17.3	19.3	15.1
17.8	14.0	15.9	16.8	21.5	17.9	17.5	21.2	21.2	17.4	22.5	21.2	14.7	16.4	20.5
24.5	36.0	4.3	19.0	15.7	19.1	7.3	15.2	18.9	5.7	15.4	15.6	11.7	6.3	14.4
31.8	12.0	6.0	21.7	24.9	7.8	11.7	23.7	18.0	11.3	17.5	26.1	7.9	11.0	23.5
3.3	2.0	3.4	3.2	4.3	6.6	7.0	4.5	4.8	5.0	4.5	4.3	5.0	5.0	4.4
33.1	34.5	32.7	33.0	31.4	32.8	30.7	31.4	31.3	32.0	31.5	31.6	32.1	31.3	31.6
9.1	9.3	8.8	9.0	8.7	9.2	7.8	8.7	8.5	8.8	8.6	8.8	8.8	8.0	8.7
6.2	6.1	5.1	5.8	6.1	6.4	5.5	6.1	6.3	5.8	6.1	6.1	6.3	5.5	6.1
23.5	10.0	12.9	18.8	28.2	11.1	9.2	26.7	19.1	12.2	11.6	27.6	11.0	9.6	24.2
10.2	.0	.0	6.0	12.4	.2	.0	11.4	7.0	.0	3.3	12.1	.1	.0	9.9
25.9	14.0	16.4	21.6	21.0	27.6	26.1	21.4	14.4	18.5	10.7	21.1	23.4	22.5	20.8
42.0	46.0	20.7	34.9	48.7	50.9	42.6	48.3	33.5	35.9	23.5	46.9	49.0	38.3	44.8
22.8	28.0	35.3	26.9	33.9	39.5	48.6	34.9	25.1	43.3	21.1	32.6	51.9	48.7	34.4
11.2	18.0	16.8	13.4	11.3	8.3	11.1	11.2	6.9	12.8	5.9	11.2	8.3	11.9	10.8
67.0	66.0	24.6	52.2	72.3	61.2	37.0	69.9	44.0	28.2	26.9	70.8	53.3	30.1	63.8
12.1	16.0	9.5	11.3	15.6	15.8	13.5	15.4	8.1	12.4	6.5	14.9	15.5	15.5	14.6
14.5	4.0	.9	9.2	10.2	7.3	.6	9.6	7.7	2.3	4.2	10.4	6.6	.6	8.9
13.5	8.0	6.0	10.5	11.4	10.9	7.2	11.1	8.3	5.5	5.1	11.5	8.6	5.4	10.4
6.2	10.0	37.9	16.8	4.7	6.1	25.1	5.9	2.9	18.7	5.3	4.7	4.7	22.0	6.5
1.2	2.0	7.3	4.5	1.2	1.4	3.0	1.4	33.3	10.9	49.5	2.6	1.9	4.0	5.2
14.3	14.0	15.5	14.4	16.7	18.7	23.3	17.1	13.7	17.6	10.2	16.1	25.5	24.6	17.0
82.7	78.0	74.1	78.6	79.9	75.6	72.3	79.2	49.3	65.8	37.6	78.9	69.4	68.6	75.4
59.1	56.0	42.7	52.8	53.1	44.8	44.7	52.3	29.0	38.9	22.3	52.7	35.7	41.3	49.4
5.5	10.0	7.3	6.3	9.1	18.2	11.3	9.5	7.8	8.8	5.5	8.9	23.1	10.4	9.5
12.4	6.0	18.5	13.9	9.6	3.2	9.7	9.5	6.4	9.0	5.0	9.5	3.9	10.6	9.2
2.1	2.0	3.4	2.5	4.6	3.7	2.5	4.5	3.3	1.7	2.0	4.4	2.6	2.4	4.0
3.6	4.0	2.2	3.1	3.4	5.6	4.1	3.5	2.8	7.4	2.8	3.3	4.1	3.9	3.4
3.1	8.0	10.3	7.0	3.4	5.6	4.4	3.7	37.0	16.6	52.2	4.9	5.1	6.9	7.5
8.1	6.0	9.1	8.1	12.7	12.3	14.2	12.8	10.5	8.8	6.9	12.1	15.3	14.4	12.2
6.2	8.0	6.5	6.3	4.0	6.5	9.2	4.3	3.2	8.8	3.3	4.0	10.2	10.2	4.8
61.8	50.0	56.9	58.7	58.2	48.0	51.3	57.5	34.1	43.1	25.7	57.3	41.7	47.1	54.1
20.9	28.0	17.2	19.9	21.6	27.6	21.0	21.7	15.2	22.7	11.9	21.6	27.6	21.5	21.3
94.6	80.0	7.6	66.1	95.0	85.5	26.1	91.2	92.3	30.2	71.0	94.9	85.2	23.7	87.8
1.2	16.0	90.9	30.5	2.1	11.7	70.1	5.8	2.1	63.9	23.5	2.0	10.7	72.2	8.9
4.2	4.0	1.5	3.3	2.9	2.8	3.8	3.0	5.6	5.9	5.5	3.1	4.0	4.1	3.3

4/ Includes individuals who did not report their citizenship at time of doctorate.
5/ Includes those who provided no usable response to the item on "racial or ethnic group" and those who used an earlier form which did not contain this item.
6/ Includes mathematics.
7/ The base for this V% is the number of doctorates in the column caption group who have found definite employment.

SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

NSF Form 558 1977
OMB No. 99-R0290
Approval Expires June 30, 1979

SURVEY OF EARNED DOCTORATES

This form is to be returned to the GRADUATE DEAN, for forwarding to ..... Board on Human-Resource Data and Analyses
Commission on Human Resources
National Research Council
2101 Constitution Avenue, Washington, D. C. 20418

Please print or type.

A. **Name in full:** ..... (9-30)
(Last Name) (First Name) (Middle Name)

Cross Reference: Maiden name or former name legally changed ..... (31)

B. **Permanent address through which you could always be reached:** (Care of, if applicable) .....

..... (Number) (Street) (City)

..... (State) (Zip Code) (Or Country if not U.S.)

C. **U.S. Social Security Number:** ___ ___ ___ - ___ ___ - ___ ___ ___ ___ (32-40)

D. **Date of birth:** ..... (41-45) (Month) (Day) (Year) **Place of birth:** ..... (46-47) (State) (Or Country if not U.S.)

E. **Sex:** 1 ☐ Male 2 ☐ Female (48)

F. **Marital status:** 1 ☐ Married 2 ☐ Not married (including widowed, divorced) (49)

G. **Citizenship:** 0 ☐ U.S. native 2 ☐ Non U.S., Immigrant (Permanent Resident)
1 ☐ U.S. naturalized 3 ☐ Non-U.S., Non-Immigrant (Temporary Resident) (50)
If Non-U.S., indicate country of present citizenship ..... (51-52)

H. **Racial or ethnic group:** (Check all that apply.) *A person having origins in —*
0 ☐ American Indian or Alaskan Native ..... any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.
1 ☐ Asian or Pacific Islander ..... any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Philippine Islands, and Samoa.
2 ☐ Black, not of Hispanic Origin ..... any of the black racial groups of Africa.
3 ☐ White, not of Hispanic Origin ..... any of the original peoples of Europe, North Africa, or the Middle East.
4 ☐ Hispanic ..... Mexican, Puerto Rican, Central or South American, or other Spanish culture or origins, regardless of race. (53-55)

I. **Number of dependents:** Do not include yourself. (Dependent = someone receiving at least one half of his or her support from you) ..... (56)

J. **U.S. veteran status:** 0 ☐ Veteran 1 ☐ On active duty 2 ☐ Non-veteran or not applicable (57)

EDUCATION

K. **High school last attended:** ..... (58-59)
(School Name) (City) (State)

Year of graduation from high school: ..... (60-61)

L. List in the table below all collegiate and graduate institutions you have attended including 2-year colleges. List chronologically, and include your doctoral institution as the last entry.

Institution Name	Location	Years Attended From	Years Attended To	Major Field Use Specialties List Name	Major Field Use Specialties List Number	Minor Field Number	Degree (if any) Title of Degree	Degree Granted Mo.	Degree Granted Yr.

M. Enter below the title of your doctoral dissertation and the most appropriate classification number and field. If a project report or a musical or literary composition (not a dissertation) is a degree requirement, please check box. ☐ (44)

Title .....
.....
.....

Classify using Specialties List
Number Name of field
....

N. **Name the department (or interdisciplinary committee, center, institute, etc.) and school or college of the university which supervised your doctoral program:** .....
(Department/Institute/Committee/Program) (School)

O. **Name of your dissertation adviser:** .....
(Last Name) (First Name) (Middle Initial)

continued on next page

SURVEY OF EARNED DOCTORATES, Cont.

P. Please enter a "1" beside your primary source of support during graduate study. Enter a "2" beside your secondary source of support during graduate study. Check all other sources from which support was received.

58 ___ NSF Fellowship
59 ___ NSF Traineeship
60 ___ NIH Fellowship
61 ___ NIH Traineeship
62 ___ NDEA Fellowship
63 ___ Other HEW
64 ___ AEC/ERDA Fellowship
65 ___ NASA Traineeship
66 ___ GI Bill
67 ___ Other Federal support (specify) .....
68 ___ Woodrow Wilson Fellowship
69 ___ Other U.S. national fellowship (specify) .....
70 ___ University Fellowship
71 ___ Teaching Assistantship
72 ___ Research Assistantship
73 ___ Educational fund of industrial or business firm
74 ___ Other institutional funds (specify) .....
75 ___ Own earnings
76 ___ Spouse's earnings
77 ___ Family contributions
78 ___ Loans (NDSL direct)
79 ___ Other loans
80 ___ Other (specify) .....

Q. Please check the space which most fully describes your status during the year immediately preceding the doctorate.

0 ☐ Held fellowship
1 ☐ Held assistantship
2 ☐ Held own research grant
3 ☐ Not employed
4 ☐ Part-time employed

Full-time Employed in: (Other than 0, 1, 2)

5 ☐ College or university, teaching
6 ☐ College or university, non-teaching
7 ☐ Elem. or sec. school, teaching
8 ☐ Elem. or sec. school, non-teaching
9 ☐ Industry or business
(11) ☐ Other (specify) .....

(12) ☐ Any other (specify) ..... (9)

R. How many years (full-time equivalent basis) of professional work experience did you have prior to the doctorate? (include assistantships as professional experience) ..... (10-11)

POSTGRADUATION PLANS

S. How well defined are your postgraduation plans?

0 ☐ Have signed contract or made definite commitment
1 ☐ Am negotiating with a specific organization, or more than one
2 ☐ Am seeking appointment but have no specific prospects
3 ☐ Other (specify) ..... (12)

T. What are your immediate postgraduation plans?

0 ☐ Postdoctoral fellowship?
1 ☐ Postdoctoral research associateship?
2 ☐ Traineeship?
3 ☐ Other study (specify) ..... } Go to Item "U"
4 ☐ Employment (other than 0, 1, 2, 3)
5 ☐ Military service?
6 ☐ Other (specify) ..... (13) } Go to Item "V"

U. If you plan to be on a postdoctoral fellowship, associateship, traineeship or other study

What will be the field of your postdoctoral study?
Classify using Specialties List.

Number Field

.... (14-16)

What will be the primary source of support?

0 ☐ U.S. Government
1 ☐ College or university
2 ☐ Private foundation
3 ☐ Nonprofit, other than private foundation
4 ☐ Other (specify) ..... (17)
6 ☐ Unknown

Go to Item "W"

V. If you plan to be employed, enter military service, or other — What will be the type of employer?

0 ☐ 4-year college or university other than medical school
1 ☐ Medical school
2 ☐ Jr. or community college
3 ☐ Elem. or sec. school
4 ☐ Foreign government
5 ☐ U.S. Federal government
6 ☐ U.S. state government
7 ☐ U.S. local government
8 ☐ Nonprofit organization
9 ☐ Industry or business
(11) ☐ Self-employed
(12) ☐ Other (specify) ..... (18)

Indicate *primary* work activity with "1" in appropriate box; *secondary* work activity (if any) with "2" in appropriate box.

0 ☐ Research and development
1 ☐ Teaching
2 ☐ Administration
3 ☐ Professional services to individuals
5 ☐ Other (specify) ..... (19-20)

In what field will you be working?
Please enter number from Specialties List ..... (21-23)

Go to Item "W"

W. What is the name and address of the organization with which you will be associated?

....
(Name of Organization)

.... (24-29)
(Street) (City, State) (Or Country if not U.S.)

BACKGROUND INFORMATION

X. Please indicate, by circling the highest grade attained, the education of

your father:	none	1 2 3 4 5 6 7 8 Elementary school	9 10 11 12 High school	1 2 3 4 College	MA, MD PhD Graduate	Postdoctoral	(30)
your mother	none 0	1 2 3 4 5 6 7 8 1 2 3	9 10 11 12 4 5	1 2 3 4 6 7	MA, MD PhD 8 9	Postdoctoral (11)	(31)

Signature ..... Date completed ..... (32-34)

SPECIALTIES LIST

MATHEMATICS

000 — Algebra
010 — Analysis & Functional Analysis
020 — Geometry
030 — Logic
040 — Number Theory
050 — Probability & Math. Statistics (see also 544, 670, 725, 727, 920)
060 — Topology
080 — Computing Theory & Practice
082 — Operations Research (see also 478)
085 — Applied Mathematics
098 — Mathematics, General
099 — Mathematics, Other*

ASTRONOMY

101 — Astronomy
102 — Astrophysics

PHYSICS

110 — Atomic & Molecular
120 — Electromagnetism
132 — Acoustics
134 — Fluids
135 — Plasma
136 — Optics
138 — Thermal
140 — Elementary Particles
150 — Nuclear Structure
160 — Solid State
198 — Physics, General
199 — Physics, Other*

CHEMISTRY

200 — Analytical
210 — Inorganic
220 — Organic
230 — Nuclear
240 — Physical
250 — Theoretical
260 — Agricultural & Food
270 — Pharmaceutical
275 — Polymer
298 — Chemistry, General
299 — Chemistry, Other*

EARTH, ENVIRONMENTAL AND MARINE SCIENCES

301 — Mineralogy, Petrology
305 — Geochemistry
310 — Stratigraphy, Sedimentation
320 — Paleontology
330 — Structural Geology
341 — Geophysics (Solid Earth)
350 — Geomorph. & Glacial Geology
360 — Hydrology
370 — Oceanography
381 — Atmospheric Physics and Chemistry
382 — Atmospheric Dynamics
383 — Atmospheric Sciences, Other*
388 — Environmental Sciences, General (see also 480, 528)
389 — Environmental Sciences, Other*
391 — Applied Geol., Geol. Engr. & Econ. Geol.
395 — Fuel Tech. & Petrol. Engr. (see also 479)
398 — Earth Sciences, General
399 — Earth Sciences, Other*

ENGINEERING

400 — Aeronautical & Astronautical
410 — Agricultural
415 — Biomedical
420 — Civil
430 — Chemical
435 — Ceramic
437 — Computer
440 — Electrical
445 — Electronics
450 — Industrial
455 — Nuclear
460 — Engineering Mechanics
465 — Engineering Physics
470 — Mechanical
475 — Metallurgy & Phys. Met. Engr.
476 — Systems Design & Systems Science
478 — Operations Research (see also 082)
479 — Fuel Tech. & Petrol. Engr. (see also 395)
480 — Sanitary & Environmental
486 — Mining
497 — Materials Science
498 — Engineering, General
499 — Engineering, Other*

AGRICULTURAL SCIENCES

500 — Agronomy
501 — Agricultural Economics
502 — Animal Husbandry
503 — Food Science & Technology
504 — Fish & Wildlife
505 — Forestry
506 — Horticulture
507 — Soils & Soil Science
510 — Animal Science & Animal Nutrition
511 — Phytopathology
518 — Agriculture, General
519 — Agriculture, Other*

MEDICAL SCIENCES

522 — Public Health & Epidemiology
523 — Veterinary Medicine
524 — Hospital Administration
526 — Nursing
527 — Parasitology
528 — Environmental Health
534 — Pathology
536 — Pharmacology
537 — Pharmacy
538 — Medical Sciences, General
539 — Medical Sciences, Other*

BIOLOGICAL SCIENCES

540 — Biochemistry
542 — Biophysics
544 — Biometrics & Biostatistics (see also 050, 670, 725, 727, 920)
545 — Anatomy
546 — Cytology
547 — Embryology
548 — Immunology
550 — Botany
560 — Ecology
562 — Hydrobiology
564 — Microbiology & Bacteriology
566 — Physiology, Animal
567 — Physiology, Plant
569 — Zoology
570 — Genetics
571 — Entomology
572 — Molecular Biology
576 — Nutrition and/or Dietetics
578 — Biological Sciences, General
579 — Biological Sciences, Other*

PSYCHOLOGY

600 — Clinical
610 — Counseling & Guidance
620 — Developmental & Gerontological
630 — Educational
635 — School Psychology
641 — Experimental
642 — Comparative
643 — Physiological
650 — Industrial & Personnel
660 — Personality
670 — Psychometrics (see also 050, 544, 725, 727, 920)
680 — Social
698 — Psychology, General
699 — Psychology, Other*

SOCIAL SCIENCES

700 — Anthropology
708 — Communications*
710 — Sociology
720 — Economics (see also 501)
725 — Econometrics (see also 050, 544, 670, 727, 920)
727 — Statistics (see also 050, 544, 670, 725, 920)
740 — Geography
745 — Area Studies*
751 — Political Science
752 — Public Administration
755 — International Relations
770 — Urban & Reg. Planning
798 — Social Sciences, General
799 — Social Sciences, Other*

HUMANITIES

802 — Art, History & Criticism
804 — History, American
805 — History, European
806 — History, Other*
807 — History & Philosophy of Science
808 — American Studies
809 — Theatre and Theatre Criticism
830 — Music
831 — Speech as a Dramatic Art (see also 885)
832 — Archeology
833 — Religion (see also 881)
834 — Philosophy
835 — Linguistics
836 — Comparative Literature
878 — Humanities, General
879 — Humanities, Other*

LANGUAGES & LITERATURE

811 — American
812 — English
821 — German
822 — Russian
823 — French
824 — Spanish & Portuguese
826 — Italian
827 — Classical*
829 — Other Languages*

EDUCATION

900 — Foundations: Social & Philosoph.
910 — Educational Psychology
908 — Elementary Educ., General
909 — Secondary Educ., General
918 — Higher Education
919 — Adult Educ. & Extension Educ.
920 — Educ. Meas. & Stat.
929 — Curriculum & Instruction
930 — Educ. Admin. & Superv.
940 — Guid., Couns., & Student Pers.
950 — Special Education (Gifted, Handicapped, etc.)
960 — Audio-Visual Media

TEACHING FIELDS

970 — Agriculture Educ.
972 — Art Educ.
974 — Business Educ.
976 — English Educ.
978 — Foreign Languages Educ.
980 — Home Economics Educ.
982 — Industrial Arts Educ.
984 — Mathematics Educ.
986 — Music Educ.
988 — Phys. Ed., Health, & Recreation
989 — Reading Education
990 — Science Educ.
992 — Social Science Educ.
993 — Speech Education
994 — Vocational Educ.
996 — Other Teaching Fields*

998 — Education, General
999 — Education, Other*

OTHER PROFESSIONAL FIELDS

881 — Theology (see also 833)
882 — Business Administration
883 — Home Economics
884 — Journalism
885 — Speech & Hearing Sciences (see also 831)
886 — Law & Jurisprudence
887 — Social Work
891 — Library & Archival Science
897 — Professional Field, Other*

899 — OTHER FIELDS*

* Identify the specific field in the space provided on the questionnaire.

CODE NUMBERS FOR FIELDS DISPLAYED IN TABLE 2

Physics & Astronomy (101-199)
Chemistry (200-299)
Earth Sciences (301-399)

Physical Sciences Subtotal (101-399)
Mathematics (000-099)
Engineering (400-499)

EMP Total (000-499)

Basic Medical Sciences (540-542, 545-548, 564-566, 572)
Other Biosciences (544, 550-562, 567-571, 576-579)

Biosciences Subtotal (540-579)
Medical Sciences (520-539)
Agricultural Sciences (500-519)

Life Sciences (500-579)

Psychology (600-699)
Economics and Econometrics (720, 725)
Anthropology & Sociology (700,710)
Political Science, Public Administration, International Relations (751-755)
Other Social Sciences (708, 727-745, 770-799)

Social Sciences Total (600-799)

Total Sciences (000-799)

History (804-807)
English & American Language & Literature (811-812)
Foreign Languages & Literature (821-829)
Other Humanities (802, 808-809, 830-879)

Humanities Total (802-879)

Professional Fields (881-897)

Education (900-999)

Total Non-Sciences (802-897, 900-999)

Other or unspecified (899)